

MODIFICATION AND EXPANSION OF CENTRAL
BAKERY SERVICES TO RESIDENCE HALLS
AND GREEK LIVING UNITS AT
OKLAHOMA STATE
UNIVERSITY

By

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Bachelor of Science

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Cleveland, Ohio

1970

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
July, 1973

NOV 16 1973

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ACKNOWLEDGMENTS

This thesis is dedicated to two very special people: to the late Sister Mary Cordilia, S.N.D., the author's major professor at Notre Dame College, and to Mr. Joe Blair, Director, Residence Halls Food Service, Oklahoma State University, who was the author's first "real boss". These people came into the author's life at two very influential times. Sister Mary Cordilia encouraged the author to enter the field of dietetics. And, after completing the OSU Dietetic Internship Program, Mr. Blair offered the author "challenges and opportunities" (the Central Bakery and a Master's Degree) as a member of his food service staff.

The author's life has also been influenced by many other fantastic people: Miss Mary Leidigh, thesis adviser and world's champion helper; Mrs. Julius Pattillo, my sounding board; Mr. John Wills, who was very patient and understanding; Miss Mary Barnes, the best housemom a girl could have; Dr. Nick Stinnett, Dr. Esther Winterfelt, Dr. Bernice Kopel, and Mrs. Allene Brown, thesis committee members and great morale boosters; Gordy, Ivan and Bob, who made life worth living even while writing a thesis; and members of the Residence Halls Food Service staff who encouraged the research and found valuable material that was included in this thesis. To each of these people a great big "thanks a whole bunch". The author will be as kind and considerate to others as a payment to these people and close friends.

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CHAPTER I

INTRODUCTION

The Oklahoma State University (OSU) Central Bakery is a service unit that has been delegated the responsibility of supplying the six OSU Residence Halls, Iba Hall (athletic dormitory), Dairy Salesroom, and the Greek Living Units with quality, standardized products. This one source also develops the necessary procedures for ordering, producing, and delivering bakery products to these units. The bakery is an integral part of the Food Service Center which also includes a meat fabrication unit and a central warehouse.

As Central Bakery Manager of the Residence Halls Food Service at OSU, it appeared through familiarity with operations, that the bakery service to the Residence Halls could be improved by modifying the cycle menu. This modified cycle menu would then be utilized to improve the bakery services to the Residence Halls and could aid in solving many of the unique problems that were related to centralization. As a result of improving services and solving centralization problems, bakery services could be extended to fraternities and sororities. Therefore, the purposes of this research were to modify the present central bakery cycle menu to the OSU Residence Halls, and to expand the bakery services to the residents of fraternities and sororities. This expansion depended upon the successful modification of the Residence Halls Bakery Cycle Menu.

CHAPTER II

REVIEW OF LITERATURE

Centralized food processing facilities or commissaries are "in" for both the commercial and institutional food service industries.

Webster (1) defines centralization as "to organize under one control".

Argyris (2) is more specific:

. . . the more a part contributes to the whole and to the other parts, the more central it is to the organization. The less a part contributes to the whole and to the other parts, the less central it is to the organization.

In 1971 United Air Lines (UAL) opened a new commissary bakery adjacent to Chicago's O'Hare International Airport. Two other king-size central commissaries equipped with bakeries were opened by United in Newark and San Francisco (3). Sara Lee's centralized kitchen in their Deerfield, Illinois plant daily produces 1,000,000 frozen bakery products (4). The national school lunch program has been instrumental in establishing central kitchens which serve several satellite schools (5).

There are many factors that are responsible for the development of these central commissaries: concentration of technological skills, consolidation of technical equipment, increased employee productivity and morale, controlled quality, product standardization, unified purchasing, and products can be mass produced to meet the specific needs of the operation.

Concentration of Technological Skills

The commissary is a large scale food production unit that utilizes the services of chefs, cooks, dietitians, and food technologists to mass-produce food. These qualified people are working together in a centralized operation, therefore their skills are best utilized centrally rather than in the individual outlets.

Technical Equipment, Increased Employee Productivity, and Morale

The new bakery in UAL Central O'Hare Commissary was designed especially for the air lines operation and was laid out for automation and mechanization to eliminate hand work. Lyell Cook (3), UAL chef and bakery head says:

Our idea was to turn over all the routine work to the machines wherever possible and to have the skilled men do only the work that requires their skills . . . we immediately increased our output. And as production went up, morale went up too, because the men like the new setup, and they went on only one shift, five days, with Saturday and Sunday off every week.

Minor (6) also states that productivity of employees working in a commissary is very high because of the innovative equipment and technology.

Quality, Standardization, Unified Purchasing, and Specific Needs

Because of the number of skilled employees assigned to the commissaries and the types of equipment being used, product quality and standardization can be more easily controlled. Another important aspect to note is that commissaries can mass produce the type of product

specified. For example; the UAL bakery is producing products that one could not easily attain from an outside source because of the quality, type of items, and size. Before the commissary, uniformity was very difficult to maintain (3). By eliminating the need for a kitchen at every airport or school, purchasing becomes unified and simplified (5).

Other advantages accruing from centralization are:

- (1) elimination of duplicated jobs
- (2) easier supervision
- (3) concentrated storage
- (4) minimal transportation of food if the centralized area's outlet is within the same building (7).

The principal disadvantages that may arise in centralization are:

- (1) bottlenecks in the preparation area
- (2) added traveling time (7).

Advantages and disadvantages should be carefully weighed before the feeding facilities are put into operation (7).

The centralized food processing facility or commissary creates many concerns for management: possible use of a cycle menu that will meet the needs of the customer, food packaging and transportation, employee scheduling, and future commissary operations.

Cycle Menu

The cycle menu as a very important management tool ties together the interests of management, the worker, and the consumer (8). A menu is defined as a list of foods to be served, and their methods of preparation. A cycle menu is a "set of carefully planned menus which are

rotated according to a definite pattern" (9). Cycle menus are planned for three to four weeks or more, and then repeated. Because of seasonal variations and recipe changes, the repeated cycle menu normally differs from the original (10). Pinney (11) points out that after the initial planning of the cycle menu, the developers do not sit back and consider their task completed. "Flexibility must be the keyword in the use of any cycle menu" (11). The cycle menu should not follow a fixed pattern but should be used as a guide and a convenience (11).

Treat (8) feels that menu planning is the responsibility and function of management because of the effect the menu has upon work flow, ease of service, food cost, and volume of business. Menu planning is not a task that can be given to someone without training and experience as there are many influences on menu decisions.

Menu-making cannot be reduced to a formula that will work each day, because tastes of customers vary from day to day and season to season. When the type of customer and the available facilities have been decided, there are eight considerations that must be kept in mind when writing a menu. According to "Profitable Food and Beverage Operation" (7) these are:

- (1) the refrigerator
- (2) the market
- (3) the calendar
- (4) the clock
- (5) the neighborhood or clientele
- (6) the kitchen
- (7) appearance
- (8) price

Stokes (12) also lists similar considerations in menu-planning:

- (1) needs and desires of patrons
- (2) variety
- (3) appeal
- (4) seasonal factors
- (5) foods available
- (6) physical equipment
- (7) nutritional balance
- (8) price structure

The use of cycle menus has many advantages. When the initial planning has been completed, the planner has time to review and revise the cycle to meet changing needs. These needs include: changes in personnel, and unavailability of food items or the use of new ones. Repetition of the menu helps to standardize preparation procedures. Employees become familiar with the products and can organize work more efficiently. In addition, work loads become constant and evenly distributed, equipment is used more efficiently, the purchaser becomes familiar with product usage, and inventories are more easily controlled. There are also disadvantages associated with the use of cycle menus. If the cycle is too short, repetition of products may become monotonous and the same food may be served on the same day. The cycle menu could be more costly if seasonal variations and increased product cost are not taken into consideration. The cycle menu can be an important management tool if the above factors are kept in mind (10).

Food Packaging and Transportation

Packaging and transportation are two vital parts of centralization. Packaging must be planned for each situation. Before a package is designed, there are certain procedures that should be followed: general analysis of the client's requirements; study of the client's marketing problem; specific study of product; the package material, and client's methods of packing and transport; preparation of recommendation and design; costing; testing of designs; finalization of design; preparation of working drawings; and co-operation with suppliers and printers (13).

The above procedures seem even more important to the purposes of packaging which are: a form of protection--eliminates waste by spoilage; hygenic--because it cuts out handling; provides economy for the retailer--no wrapping or weighing; products are easier to handle while being transported and delivered; carries the advertiser's message; provides display value; simplifies storage problems; provides consumer convenience; and preserves the product's aroma, freshness, and appearance. All of these factors can be reduced to four main purposes: protection, convenience, economy, and appearance (13).

Packaging would be of no value without the transportation link between producer and consumer. In its broadest sense, transportation includes:

- (1) internal movement of merchandise from production areas to loading docks to vehicles
- (2) shipping merchandise from commissary to the outlets
- (3) purchasing, operating, maintaining, and dispatching vehicles
- (4) training and supervising transportation employees

- (5) keeping records and analyzing these records in order to maintain an efficient transportation department (14).

Bakery products must be handled with care. Some delivery trucks are heated in the winter and cooled in the summer to keep baked products within the range of 70° F. to 80° F. Cooler temperatures could cause firming and could "speed-up" the staling process, while higher temperatures tend to cause condensation on the surface of the product. Kaylin (14) emphasizes bakery product handling by stating that:

The entire effort of a central baking operation to produce a quality product can be negated unless the baked food products are handled properly. As baked goods cannot stand rough handling, containers of baked products should not be thrown or dropped.

Employee Scheduling

In order to accomplish the daily production goals of commissaries, schedules are a necessity. According to O'Brien (15), "scheduling involves the arrangement, coordination, and planning of the utilization of resources to achieve an objective." Time is the resource present in all scheduling.

New technological developments and improved planning techniques have shortened certain phases of bakery production while lengthening others. These factors must be carefully analyzed in order to develop coordination and interrelationships among production areas. Because of the impact scheduling has upon the total operation, scheduling should be a staff function (15).

The trend in the baking industry has been to have employees work during the early morning hours to insure delivery of "freshly" made

products. This concept is vanishing. Many bakeries utilizing the latest technological developments in baking, freezing, and delivery techniques have their employees working daytime hours only (16).

There must be a certain amount of "flexibility" in scheduling. The schedule that was used for an early morning bakery shift may not work as well for a late shift. Moving from an old facility into a new one creates many challenges to the production personnel. These employees need to be retrained so initial production speed is lower than was planned (16).

Future Commissary Operations

Commissaries are being operated with the future in mind. Present production procedures are the keys to maintain current needs and are the foundations for the future. For example, the UAL Central Bakery at O'Hare is presently serving bakery products to flight kitchens in Cleveland, Detroit, Washington, D. C., New York City, Portland, and Grand Rapids; nine international Flight Kitchens at O'Hare; the Palmer House and Continental Plaza Hotels in Chicago; and is looking for more business. Only one production staff is presently being utilized. In the future, this will be expanded to three (3).

Similarly, the Food Service Center (FSC) at OSU houses a central grocery warehouse which includes canned, frozen, and refrigerated products, a meat fabrication unit, and a central bakery. All food transactions for the six Residence Halls Food Service (RHFS), University Hospital, Iba Hall (the athletic dormitory), and the Dairy Salesroom are conducted through the FSC. In order to expand this service, the Oklahoma State University Food Service has offered the Greek Living

Units (GLU) the opportunity of purchasing grocery and meat products from the Food Service Center since the Fall of 1970.

To obtain information from other universities concerning their GLU food programs, a survey (Spring, 1972) was sent to 38 University Food Service Directors selected at random from the National Association of College and University Food Services (NACUFS) members. From the 24 University Directors who responded, five indicated that their food services were supplying products to the GLU. Some universities were interested in this type of service, while others, because of state taxes and the closing of Greek Houses, did not want any part of the program (17).

Oklahoma State University was included in the results of this study. Two out of the six schools surveyed sent pre-prepared products from their own dormitory kitchens in to the Greek Houses. These were the only two that furnished bakery products. While one school provided delivery service for the pre-prepared food, the other did not. The food was picked up by the individual GLU participating in the program (17).

After two years, 24 of the 33 fraternities and sororities at OSU have participated at some time in the GLU food program. Those participating desired the services (meats and groceries) expanded to include products from the central bakery.

The use of a commissary or any type of centralization has helped to improve the food service industry by allowing: a concentration of technological skills, consolidation of technical equipment, increased employee productivity and morale, controlled quality, product standardization, unified purchasing, and mass production of products to meet the specific needs of the operation.

Centralization has helped the food service industry, but many additional concerns have been created for management: possible use of a cycle menu that will meet the needs of the customer, food packaging and transportation, employee scheduling, and future commissary operations.

CHAPTER III

MODIFICATION OF THE BAKERY CYCLE MENU AND BAKERY EXPANSION TO THE RESIDENTS OF FRATERNITIES AND SORORITIES

Procedure - Part I

The purposes of this chapter are to discuss the procedures involved in executing the modification of the bakery cycle menu and bakery expansion to the fraternities and sororities. This section will discuss procedures employed to improve the existing bakery service to the Residence Halls Food Service by modifying the bakery cycle menu. The existing service included the use of a four-week cycle menu (Bakery Cycle Menu I, Appendix A). The cycle listed the products that the residence halls could purchase from the Central Bakery on a daily basis and was used as an ordering guide for the residence halls. The length of this bakery cycle menu was determined by the five-week residence halls entree and vegetable cycle menu. Since these two cycle menus were not often changed, their lengths were varied in order that the same desserts would not always be served with the same entree and vegetable. Some residence halls did not order all of their bakery products from the Central Bakery, but made some of their own products. Those halls that were ordering from the Central Bakery determined the type of bakery product that was served at each meal from the selection offered on the cycle menu. With the variety offered on this menu, much of the bakery

production time was spent producing two products for one residence hall and three different products for another.

The bakery cycle menu followed a definite pattern. The daily selection included: two different kinds of round cakes, three baked pies, two miscellaneous products (cookies, cobblers, bars, jelly rolls, and so on), three types of breads and breakfast rolls. Because of the number and types of products offered each day, bakery production was not as efficient as it could be, and product quality was very poor.

In order to modify the cycle menu, the researcher considered many factors: available equipment (Appendix C), number and schedule of bakery employees (Appendix D), attainability of ingredients and their cost, production time and area work load, product variety, ease of transporting products to the residence halls, and length of the cycle menu. This type of evaluation was needed in order to develop and improve the residence halls bakery cycle menu.

Available Equipment (Appendix C)

To determine what products could be placed on the modified cycle menu (Bakery Cycle Menu II, Appendix B) and the frequency of their appearance, the types and amount of equipment in the Central Bakery had to be evaluated. The bakery did not have the Kotten Dandy cake depositor attachment for scaling muffins, therefore, the incidence of muffins on the cycle menu was limited. Two varieties of cookies were not placed on the cycle menu for the same day, because there was only one cookie dropper. Although this machine could be cleaned between uses, there would be additional time and labor spent in having it cleaned. In the above instances, the cycle menu was planned to

distribute the work load among the different types and amounts of available equipment.

Number and Schedule of Bakery Employees

(Appendix D)

Nine full-time employees (excluding manager) was an adequate number for the amount and type of production to be completed in the Central Bakery. The modified cycle menu influenced the work schedules of bakery employees. Products that required extra time and labor for their completion would be distributed throughout the cycle menu. If the production was lighter on one day and heavier on another, advanced production was scheduled on the lighter day.

The employee work schedule took into consideration the products that were on the cycle menu, available equipment, and the Residence Halls Food Service customer's needs. In order to have fresh breakfast rolls to the RHFS units by 6:30 a.m., bakery production began at 12:00 a.m. The employees were scheduled to arrive at intervals due to the production load and available equipment.

Cost and Attainability of Ingredients

In determining cost and attainability of ingredients the Central Bakery Manager had many concerns. These were: competitive bidding, quality and supply of the ingredients, delivery lead time, and seasonal foods.

The cost of bakery ingredients was determined by competitive bidding. When these bid quotations were received by the Food Purchasing Agent at the OSU Food Service Center bid elimination took place. In

addition to the bid quotation, quality of the ingredients and their attainability were considered. If Company A had a low bid price and quality ingredients, but could not supply the ingredients by a specified time, then the bid would be given to Company B who could meet all of the specifications. On the other hand, Company B might deliver a carload of ingredients later than anticipated or a complete order could not be supplied by them. In either case, the Central Bakery Manager had to determine if a substitution should be made on the cycle menu. If a specified mix could not be obtained, the manager had to determine whether the product could be made from "scratch" without hampering the production schedule.

In the Central Bakery there were some ingredients that had to be ordered at least two months in advance of delivery. Powdered whole eggs could be used as an example. The Central Bakery Manager had to anticipate the needs for these eggs and order accordingly. The time between placing the order and actually receiving the product (lead time) was very important for bakery production. If the order was placed in time and the eggs were not delivered, then frozen whole eggs which were more expensive, had to be utilized.

The Central Bakery is a food service area that utilizes seasonal foods and some ingredients of a specialized nature. At various times during the year, the cost of these seasonal foods may prohibit the bakery from making a product. For example: the cost of blueberries could increase to the extent that the bakery could no longer afford to make blueberry pies which were on the cycle menu. The product then would be taken off of the menu and another product substituted. The substituted product would be on the menu until the cost of the

blueberries was once again reasonable. The cost of raw ingredients determines how often or if an item will appear on the bakery cycle menu as planned. In order to have the proper ingredients available for bakery production, the Central Bakery Manager had to become aware of the volume of use, their availability, lead time required for delivery, and seasonal product changes.

Production Time and Area Work Load

In planning the modified bakery cycle menu, the time required for production of products was considered. Those products that required more preparation time were dispersed throughout the cycle menu. For example: apple dumplings and peach turnovers require more time for completion than an apple cobbler or peach crisp, and therefore would be spaced several days apart.

The Central Bakery is divided into the pie, cake, dinner roll, breakfast roll, and miscellaneous production areas. Each area is responsible for a particular item or items that occur on the cycle menu. The cycle menu therefore was planned to distribute the day's production work among these areas. For example: if three varieties of pies and no cakes were planned on the cycle menu for a day, the work load in the pie area would be too heavy and there would be no work assigned in the cake area. Planning the cycle menu helped to evenly distribute the day's work in the various bakery areas.

Variety

Offering a variety of bakery products for the Residence Halls Food Service was a necessity because of the type clientele being served. New

recipes were located to be developed and tried for Bakery Cycle Menu II. Plans were to vary the basic chocolate, white, and yellow cake mixes in as many ways as possible. Also, plans were made to vary the colors and recipes of cake icings to change the appearance of the products.

Variety also was to be attained by varying shapes and sizes of the baking pans. Baking a product in a round, sheet, tube or muffin pan could make a product look totally different. Fruit cobblers, crisps, and tarts were placed on the Cycle Menu II in order to break the monotony of fruit pies. The Residence Hall's Managers were asked to serve some desserts warm, since serving temperature played a part in the popularity of a product. Products were dispersed on the Cycle Menu II in such a way that there would be a different type of bakery product offered on each day.

Feedback regarding the products on the menu was obtained from managers and supervisors in the various residence halls. These people checked the dessert counters, noted student's preferences and relayed these preferences to the Bakery Manager by telephone or in staff meetings. The quantity of a product ordered also gave some indication of acceptance. It was felt that flexibility within the original Bakery Cycle Menu I was the "key" to success for the modified Bakery Cycle Menu II.

Transporting Bakery Products

The Central Bakery had its own loading dock and unrefrigerated, enclosed, delivery truck. The delivery truck could hold as many as 20 Cres-Cor metal delivery carts, which were used for transporting the

products. These are enclosed metal carts with 17 shelves. A bar lock across the inside of the truck kept the carts in place and helped in safely transporting bakery products to the Residence Halls Food Service.

All bakery deliveries were made to the on-campus units between 5 a.m. and 7:30 a.m., Monday through Saturday. In order to collect the bakery equipment from these units, two part-time men were scheduled from 4:45 p.m. until 6:15 p.m., Monday through Friday. On Saturdays, the equipment was collected from the residence halls immediately after the deliveries had been made.

Because of the distance (0.8 to 1.7 miles) from the Central Bakery to the six Residence Halls Food Service Units, Iba Hall, and the Dairy Salesroom, there were limitations on the types of products that could be placed on the cycle menu. Principle limitations were: size of products in relation to size of delivery cart, length of time involved in bakery deliveries, lack of refrigeration during the delivery time and fragility of the products, and equipment return to the bakery.

As long as the bakery product was baked in or could be placed on a sheet pan, the product could be fitted into a delivery cart. Length of time for bakery deliveries involved accuracy of loading delivery carts, sequence of loading the delivery carts into the bakery truck, unloading the carts from the truck, and finding a person responsible at each delivery stop for checking-in and signing for the bakery products. Bakery products requiring continual refrigeration were not placed on the residence halls cycle menu because the bakery truck was not refrigerated. An ice cream pie would be an example of such a product.

Delivery of the carts was begun at 5:00 a.m. The equipment (carts and pans) was returned to the bakery starting with a pick-up at 4:45

p.m. Since the majority of bakery products on the cycle menu required the use of sheet pans for baking or transportation purposes, return of the pans was necessary. Delivery carts also had to be returned to the bakery for further deliveries of the products.

Length of the Modified Bakery Cycle Menu

The modified Bakery Cycle Menu II would be five weeks in length. Since the residence halls five-week entree and vegetable cycle menu and the bakery cycle menu were planned to be frequently changed, a shorter bakery cycle was not needed.

The five-week bakery cycle menu would be more convenient for the people in the residence halls who were doing the ordering. If orders were being written for week number one of the entree and vegetable cycle menu, then week number one of the bakery cycle menu would also be used.

The Central Bakery faced many unique problems that were related to centralization. The cycle menu was considered an important tool that was utilized to help solve some of these problems. In order to modify the cycle menu, the Central Bakery Manager considered: attainability of ingredients and their cost, product production time and area work load, and likes and dislikes of the customers. The variety of products, ease of transporting the products to the residence halls, and length of the cycle menu were also evaluated.

Procedure - Part II

This section discusses the second purpose of this study which was to expand the Central Bakery services to the residents of fraternities

and sororities. This could only be accomplished by coordinating the service to the residence halls with the Greek Living Units. Therefore, revised services to the residence halls had to be established before services to the GLU could be developed.

After the five-week bakery cycle menu had been modified for the Residence Halls Food Service and problems of producing and transporting these products were generally under control, supplying bakery products to the GLU at Oklahoma State University was investigated. Many decisions had to be reached before the Central Bakery could initiate a pilot study to supply the GLU. Those to be made prior to the fall semester of 1972 were: (1) desire for the program, (2) selection of the GLU for the pilot program, (3) GLU cycle menu, (4) packaging of the bakery products, (5) transportation equipment, (6) delivery schedule and route map, and (7) ordering and billing procedures.

Desire for the Program

Hostesses from the fraternities and sororities were invited to tour the Food Service Center during annual orientation programs. Many hostesses inquired about buying bakery products for their houses and gave information as to the products GLU students wanted and needed from the OSU Food Service.

Selection of Units for the Pilot Program

Ten fraternities and sororities were selected to participate in the pilot program for bakery products on the basis of volume of business that they had generated at the Food Service Center during the 1971-1972 school year. These ten were: Alpha Delta Pi, Farmhouse, Kappa Sigma,

Phi Delta Theta, Phi Kappa Psi, Phi Kappa Tau, Phi Kappa Theta, Sigma Chi, Sigma Nu, and Zeta Tau Alpha.

GLU Bakery Cycle Menu

A five-week Bakery Cycle Menu II was written for the residence halls. From this cycle menu, a five-week bakery cycle menu was written for use by the fraternities and sororities (Appendix E). The product selection was more limited but the menu was more specific. This menu form provided space for the day and date of possible purchase, the unit of purchase, the portion size, and amount to be ordered.

Obtaining variety in the GLU cycle menu was difficult. There could be no control over the temperature of the dessert when it was served. The shape of the cakes was limited by the fact that the selected GLU did not have enough students per house to warrant purchasing a sheet cake, which is calculated to serve 54 people. Round, tube or cup cakes were the three cake shapes that were offered on the GLU cycle menu.

Feedback from the GLU regarding likes and dislikes of the bakery products would be obtained by telephone calls to the Central Bakery Manager and by comments made to the bakery delivery person.

Packaging of Bakery Products and Their Delivery Containers

The researcher immediately found that packaging and delivery of bakery products to the GLU would be difficult. Equipment that had been used for the residence halls would not be practical for the new program. It had been established that products made in the Central Bakery would be delivered and stored in the Residence Halls Food Service, Iba Hall.

and the Dairy Salesroom in closed metal carts and, therefore, would not need to be wrapped. When unwrapped products delivered to the GLU were placed on sheet pans, in delivery carts, and delivered to GLU, there was no way to keep an accurate inventory of the carts and sheet pans. The Central Bakery could schedule a pick-up of the equipment, but that would involve additional time and labor, and would not guarantee that all of the equipment would be returned. Further investigation determined that the metal delivery carts could only be transported in the enclosed bakery truck. The GLU driveways were narrow and in many cases there appeared to be no way for unloading a cart without damage to the cart and its contents. Therefore, another means of transporting the bakery products had to be developed along with a way to package the products.

Two paper companies, the Herron Packaging Company (HPC), and the Tulsa Paper Company (TPC), were contacted to design disposable cardboard boxes. Initially, the HPC experimented with a cardboard container that could be used to transport all of the bakery products. The container consisted of an outer box A that was tubelike in construction, and an inner box B that would slide into the outer box. Four separate inserts C were designed to fit securely into the inner box. (See Figure 1.) Cakes and pies would fit into the inserts in order that the products would not move while being transported. The entire box was designed in order that four cakes or four pies or a combination of the two could be placed in the one box for delivery purposes. Breakfast rolls or dinner rolls would be placed into the inner box B and this would eliminate the use of the inserts.

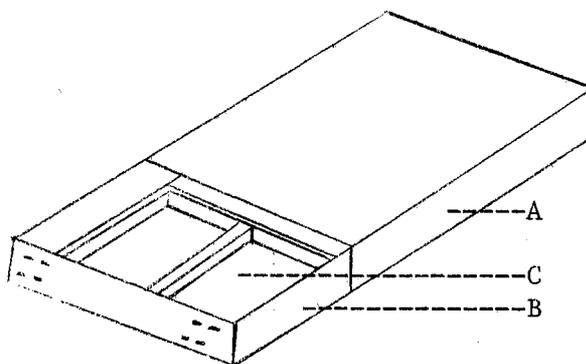


Figure 1. Cardboard Container D

The company planned that the outer box A would cover the product while it was being transported from the Central Bakery to the GLU. Because of the expense of the entire box (\$0.65 plus the inserts) the only portion that would be left in the GLU would be the inner box B without the insert or inserts C alone. This would be dependent upon the type of bakery product that was being delivered.

The researcher examined the box D and found that the bakery pies were too large for the inserts and that cakes were the only products that could be transported with the use of the inserts. Also, the box would not fit on the bakery open racks. Since the researcher wanted the GLU order placed into the container in the bakery where it would be placed on an open bakery rack and wheeled to the loading dock, this box would not meet the researcher's needs. Once this procedure was explained to the representative of the HPC, he took the dimensions of the bakery rack and had another box designed.

The newly designed cardboard box E (Figure 2) had a lid and fit perfectly on the bakery open rack. Because of the added length of this box, the inserts from box D no longer fit securely. A piece of

cardboard F (Figure 2) was placed into box E in order to keep the inserts in place. A pie insert G (Figure 2) was designed for box E. This pie insert had four eight and one-half inch diameter rounds cut out to hold the pies in place. There were also two one inch holes cut out of the cardboard in the middle of each end of the pie insert. These holes were made in order to lift the pie insert out of the box E without removing any of the pies. The orders were identified by writing the name of the GLU on the side of the delivery box.

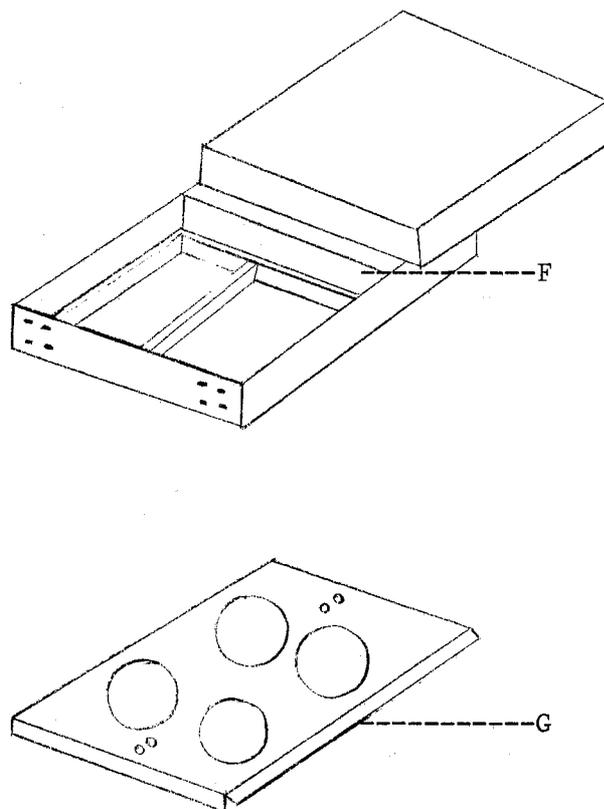


Figure 2. Cardboard Container E with
Pie Insert G

Box B of Figure 1 and the entire box E of Figure 2 needed to be assembled. The boxes would be delivered flat and a bakery employee would have to fold and staple the cardboard sides. The separate inserts for pies and cakes would be ready for use as delivered.

A third delivery container which was designed by the TPC resembled hat box H when assembled (Figure 3). This container could be used to transport individually boxed pies and cakes. The top portion had two holes for a plastic carrying handle. Opposite sides of box H had cardboard flaps. The container was constructed in this manner for ease of loading and unloading the bakery products. The flaps were held together by the use of magnetic tape. Paper tags with strings would be attached to the handle in order to identify the GLU bakery order.

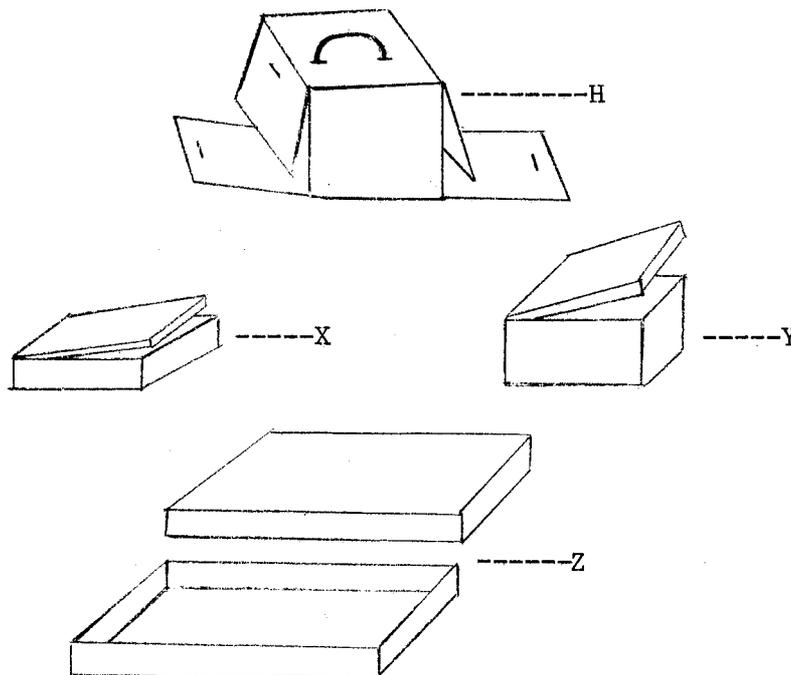


Figure 3. Delivery Container H, Pie Box X, Cake Box Y, and Garment Box Z

As many as three pies or two cakes could fit into this delivery container. Before being placed into this container, the cake or pie would be placed into individual cardboard pie box X or cake box Y (Figure 3) and then stacked into the delivery container. The individually boxed cake or pie would be unloaded in the GLU, and the delivery container would be returned each time to the Central Bakery because of its cost (\$0.57 per container). Although this container could not be used for delivery of breakfast rolls, an individually covered garment box Z could be purchased. The breakfast rolls could be placed in the garment box and delivered without the use of the delivery container.

Besides purchasing the delivery container which included the plastic handle, magnetic tape and tags; individual pie boxes (\$0.06 each), cake boxes (\$0.05 each), and garment boxes (\$0.13 each) also would have to be purchased and assembled. The TPC would supply the Central Bakery with all of the items needed by the bakery personnel to assemble the delivery containers and the individual boxes. Both companies (TPC and HPC) had similar estimated costs.

The researcher presented the samples provided by the two companies to the Director and Assistant Director of the Oklahoma State University Food Service. The container H, designed and made by the TPC, was selected. Reasons for this selection were: (1) bakery products would be continually covered, (2) the delivery container was easy to handle, (3) the HPC could not supply the bakery with the individual pie, cake and garment boxes which were necessary for daily use.

Many factors were taken into consideration when the researcher was trying to choose the best cardboard delivery container to be used; for example, (1) provision of adequate delivery and storage coverage for the

product, (2) time and labor involved in assembling the containers, and (3) cost and supply of the containers.

Transportation Equipment

With the type of bakery delivery container established, the next step was to determine the vehicle to be used in transporting the bakery products to the GLU. Investigation showed that the narrow driveways and lack of loading docks would eliminate the use of the large bakery truck. A small enclosed panel truck was used by the Oklahoma State University Meat Supply, which was located in the FSC. Since the bakery deliveries would be made during the early morning hours, this panel truck could be used for the GLU deliveries.

Delivery Schedule and Route Map

A delivery schedule (controlled by number participating and quantity of items ordered) had to be developed and a delivery map designed. It was estimated that a delivery time of five minutes per GLU was needed. A majority of the GLU wanted breakfast rolls delivered at 7:00 a.m., therefore this delivery time was chosen. It was arranged that each GLU would have to select someone to be available to sign the bakery invoice.

It was planned that the GLU bakery orders would be filled by a full time bakery employee, and one part time employee would be needed to deliver the bakery products. A specific work schedule for this part time employee could not be planned until the number of GLU participating in the program had been established.

To save driver-time in locating a particular GLU and to eliminate delivery errors, two GLU delivery route maps were developed. One map routed the GLU that were asked to participate in the Central Bakery pilot program; included in this group was the University Fire Station (UFS) area (Appendix F). The second map routed all the GLU and the UFS (Appendix G). The location of the GLU and the UFS were numbered on the route maps. These numbers corresponded to a separate sheet (Appendix H) that listed the names, addresses and the delivery route of the GLU.

Ordering and Billing Procedures

To inform the ten GLU of their selection for the pilot bakery program, a letter would be mailed to each of the ten houses (Appendix I), which listed information concerning the bakery cycle menu, ordering, delivery, receiving, and billing procedures. Any comments regarding the procedures or bakery products were invited.

A price list (Appendix J) also would be mailed to each house. These prices differed with those of the residence halls because of: additional cost involved with the use of individual cake, pie, and garment boxes; dessert sizes differed with those offered to the residence halls; and because the GLU were charged a 12 percent mark-up for handling and delivery of products.

A new billing invoice (Appendix K) needed to be designed. This invoice would list the specific type of product and quantity ordered, individual price and the extended price of the product. The bottom portion of the invoice would have a place for: (1) total price, (2) signature, day and date of delivery, and time of delivery, and (3) address of the GLU. There would be three copies of this invoice--white,

yellow, and pink. The white copy, after being signed, would remain in the GLU, and the yellow and pink copies would be returned to the bakery. The yellow copy would be sent by mail to accounting services for billing, and the pink copy would be retained for the bakery records.

CHAPTER IV

RESULTS AND DISCUSSION

The Oklahoma State University Central Bakery was built to service the six Residence Halls, Iba Hall (athletic dormitory), and the Dairy Salesroom. After one year as Central Bakery Manager, it appeared to the researcher that the bakery service to the residence halls could be improved by modifying the bakery cycle menu. Therefore, purposes of this research were to modify the Residence Halls Bakery Cycle Menu I and to extend bakery services to the fraternities and sororities.

There were three stages in the development of the Bakery Cycle Menu: Bakery Cycle Menus I, II, and III. These various stages were planned by the researcher in order to improve Central Bakery services. Bakery Cycle Menu I (BCM I - Appendix A), utilized in Fall and Spring 1971, was a four-week cycle. The length of this menu was determined by the five-week residence halls' entree and vegetable cycle menu. Since these two menus were not often changed, their lengths were varied. In this way the same bakery product would not always be served with the same entree and vegetable.

Some residence halls ordered only part of their bakery products from the Central Bakery, and made others. Those halls that were ordering from the Central Bakery determined the type of bakery product that was served at each meal from the selection offered on the cycle menu. BCM I was sent to each residence hall for ordering purposes. With the

variety offered on this menu, much of the bakery production time was spent producing different products for each residence hall,

Bakery Cycle Menu I followed a definite pattern. The daily selection included: three different types of breakfast rolls, two different kinds of round cakes, three baked pies, two miscellaneous products (cookies, cobblers, bars, jelly rolls, and so on), and three types of bread. Because of the number and type of products offered each day, bakery production did not appear to be as efficient as it could be and product quality varied.

Bakery Cycle Menu II (BCM II - Appendix B), utilized in early Fall 1972 was a five-week cycle. Feedback was obtained from student food committee members, RHFS managers, and supervisors. It was planned that the five-week entree and vegetable cycle menu and the bakery cycle menu were to be modified frequently during Fall 1972.

The residence halls, prior to Fall 1972, had the option of buying or not buying products from the OSU Central Bakery. Bakery production was inefficient because of the small quantities ordered from the large variety of bakery products offered on BCM I. In order for the residence halls to better utilize the Central Bakery Services, the Bakery Product List (BPL - Appendix L) was developed. Specific bakery products that had to be purchased from the Central Bakery, products that could be made in the Residence Halls Food Service, or purchased from a commercial bakery, were on the BPL. The BPL served as an ordering and portion control guide by specifying the unit of purchase and the portion size of the bakery products.

The pattern followed for BCM II was to offer three different types of breakfast rolls, except for weekends. Raised doughnuts were the most popular breakfast roll, so this item was placed on the cycle menu Monday through Friday. Raised doughnut products were taken off on the weekend in order to include products that had better "holding" qualities. Only one type of cake was offered each day which was served for both lunch and dinner. Cakes were baked in a round, sheet, tube or muffin pan in order to have contrast in shapes on the cafeteria dessert counter. Cake purchase units were placed on the BPL in order to facilitate residence halls ordering. Baked two-crust pies were reduced in number from three to two because of the handwork involved in the pie area. Cream, Bavarian, and other single-crust "no bake" pies were added. One or two miscellaneous products were offered on the cycle menu. This number was varied to make the production load lighter so employees could help in other bakery areas or work on advanced preparation. With the knowledge gained from the BCM I orders, the researcher was aware that three types of hot bread were not being ordered and so the number was reduced to two on BCM II.

An objective for the Residence Halls Food Service during the 1972-73 school year was to have all the residence halls serving the same entrees, vegetables, and bakery products at the same time. The Assistant Food Service Director developed the entree and vegetable cycle menu, while the Central Bakery Manager developed the bakery cycle menu. Products from BCM II were placed onto the entree and vegetable cycle menu according to the meal in which the products would be served. Therefore, a complete entree, vegetable, and bakery cycle menu was

developed. This coordinated menu was sent or distributed at weekly menu meetings to each manager of each of the residence halls.

Bakery Cycle Menu II was developed to be flexible. The products were evaluated by the food service managers and supervisors at the weekly menu meetings. Many cycle menu changes were made because of customer response and product holding qualities. These suggestions were evaluated as to production feasibility by the Central Bakery Manager.

The Central Bakery Manager then developed Bakery Cycle Menu III (BCM III - Appendix M) to be utilized in the latter part of Fall 1972. This cycle menu was developed because of the number of changes that were being made on the coordinated cycle menu. BCM III was five weeks in length, and bakery products were listed according to the meal in which they would be served. Some purchasing sizes were listed next to the product. Instead of placing bakery products on the entree and vegetable cycle menu, BCM III was sent to all of the residence halls to be used in ordering.

The pattern followed for BCM III had the same number and type of breakfast rolls as BCM II. There was one type of cake offered each day with purchase sizes listed. Only one two-crust fruit pie was offered. Fruit cobblers and crisps were more frequently included. One or two miscellaneous products and one or two breads were also offered. Other dessert products were planned by the Assistant Food Service Director and listed on the bakery cycle menu. Breads ordered from the commercial bakery were also listed.

Flexibility was a requirement for BCM III. Instead of changes being made directly on this cycle menu, a new cycle menu was developed every five weeks. The same format was used and product changes were

included. If a product was popular, then it remained on the cycle menu and sometimes appeared more frequently. Unpopular products were removed from the cycle. Adding and subtracting from the BCM III was continued. Some products, although liked and well accepted by the students, have been temporarily taken off of the cycle so that new bakery items could be tried.

Bakery Cycle Menu III developed into an excellent managerial tool. The changes made in the type and variety of products offered on BCM I in comparison to BCM III have helped the Central Bakery to upgrade product quality, to distribute production work load, and to develop standard yields and bakery procedures. The new cycle menu format has assisted managers and supervisors in weekly ordering from the Central Bakery.

It was not planned as part of the procedure to change the Central Bakery working schedule. However, a time schedule change had been discussed previously and was recommended by the researcher. Because of lack of supervision during the early morning hours, variable quality of products, and problems with maintenance of equipment, the OSU Food Service Director had the Central Bakery Manager finalize plans to change the bakery schedule. This schedule change would mean daytime hours for the 1973 Spring Semester.

Many hours were spent in rewriting the employee time schedules and many changes were made after the initial schedules were put into effect. The results of this time change were positive. Employees were more alert when they came to work and productivity increased. Bakery equipment was handled more carefully. One employee was trained to become the late shift supervisor. The manager's day started by 7:00 a.m., which

provided the opportunity to help the head baker organize his work, check product quality, check quantity and recipes, and answer questions. The employees working with the recipes checked the methods and yields more carefully. The rapport between the Bakery Manager and employees improved as did employee morale. Production and delivery changes to RHFS and GLU were made to coincide with the new schedule.

During the 1971-72 school year, two part-time student employees were hired to deliver bakery products to the RHFS and the Dairy Sales-room. The Bakery Manager found it difficult to fill these two positions because of the scheduled working hours from 4:00 a.m. until 7:30 a.m. Although the positions were filled, on occasion one of the part-time employees would oversleep or not come to work. The Bakery Manager and the other Food Service Managers were dissatisfied with the way these employees handled the bakery products, the equipment, and the length of time taken for the deliveries. A full-time employee was hired for residence halls bakery delivery and sanitation, and a part-time employee to help with the deliveries during the Fall 1972 Semester. These two employees were at work at scheduled times, bakery products and equipment were handled with care, and delivery time was shortened. This research showed that there is a definite place for full-time as well as part-time employees.

Recipe development and product testing were important for supplying the residence halls with a variety of quality products. Bakery magazines supplied the researcher with valuable "current trends" in the baking industry including large quantity recipes and new product ideas.

Results and Discussion

The Food Service Center at OSU offered the Greek Living Units (GLU) the opportunity of purchasing grocery and meat products. This was seen as a financial aid and a help in obtaining institutional size food products. Those GLU participating desired the services (grocery and meat) expanded to include products from the Central Bakery.

The researcher discussed the possible bakery program with the people who were responsible for procurement of GLU food products. In the fraternities, such responsibility usually was assigned to the kitchen steward or cook or both. In the sororities, the hostess or cook or both worked together in planning the menus and ordering the food products. Initial responses about the possible bakery program were positive.

Selection of ten GLU for the pilot bakery program was determined by the volume of business that the individual GLU had generated at the Food Service Center during the 1971-72 school year. Those GLU selected for the program were sent a GLU Bakery Cycle Menu (Appendix E), a letter which introduced the program and explained the ordering procedures (Appendix I), and a product price list (Appendix J). The price list also was used to identify bakery products which the researcher felt might be unfamiliar to the GLU.

The GLU Pilot Bakery Program was begun on August 28, 1972, and lasted through the entire first semester. The program was opened to all fraternities and sororities January 15, 1973, and lasted through the entire second semester. A cycle menu was written especially for the GLU and was coordinated with the Residence Halls Cycle Menu II. Product offerings on the GLU cycle could not be as extensive as for the RHFS due

to bakery production. The Central Bakery Manager did not know the quantities of products that would be purchased by the GLU and therefore did not know if the added load would create problems in the bakery production areas. The researcher planned the GLU Bakery Cycle Menu to be flexible. Bakery products suggested by the GLU and other products offered on the Residence Halls BCM II could be added at a later time.

Although definite GLU ordering procedures were developed, on occasion, these had to be modified. Product offerings on the GLU Cycle Menu were changed to meet GLU needs. Some orders were taken on the same day the bakery products were to be delivered. If no one was in the GLU to sign for the products, the bakery delivery person signed the invoice. Since there were few Saturday bakery orders these deliveries were made on Friday.

New GLU Cycle Menus were developed during both Fall 1972 and Spring 1973 semesters to incorporate a greater number of products, and the GLU response was favorable. It is planned to have the bakery program continued as long as the GLU participate.

Table I lists the Greek Living Units who participated in the program during the first 17 weeks of the first semester. No minimum orders were established, and the GLU did not have to order on a daily basis. The "X" on Table I shows that sometime during that week, the Central Bakery delivered at least one product or products to the particular GLU listed.

During the first six weeks, the Central Bakery Manager (CBM) kept a list of other GLU who expressed an interest in the program. After six weeks, the CBM telephoned those GLU who had been selected for the pilot study, but were not participating. Since not all of the selected GLU

TABLE I

WEEKLY PARTICIPATION OF GLU - FALL SEMESTER 1972

Name of GLU and Fire Station	Weeks																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Alpha Delta Pi	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Farmhouse																	
Kappa Sigma				X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phi Delta Theta	X	X	X	X	X	X											
Phi Kappa Psi	X	X	X														
Phi Kappa Tau																	
Phi Kappa Theta																	
Sigma Chi																	
Sigma Nu			X	X				X	X	X	X	X		X	X	X	
Zeta Tau Alpha		X	X	X		X		X		X							
Fire Station	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lambda Chi Alpha						X											
Delta Delta Delta									X								
Alpha Gamma Rho										X		X	X	X	X	X	X
Alpha Xi Delta												X					

X = Participation

indicated that they were interested in the program, the bakery pilot program was made available to those other GLU who were interested.

As indicated by Table I, some GLU continually, seldom, or never purchased bakery products. A few took advantage of the program for a short period of time and then dropped out. The diversification within the Greek Living System itself explains the sporadic ordering. Some GLU did not serve hot breakfasts, therefore breakfast rolls were ordered from the Central Bakery. Those GLU who served a hot breakfast did not want the added expense of breakfast rolls. When a cook was not available and when there would be additional guests or special functions held at the GLU, bakery services were more often utilized. The GLU Bakery Program had to be flexible in order to meet the needs of the GLU.

Table II lists the bakery products that were offered on the GLU Bakery Cycle Menu, unit of purchase and the weekly quantities purchased. Breakfast rolls were the most frequently purchased bakery products. Pies and cakes ranked second and third in choices. Decreases in GLU ordering on week 13 and 17 were due to Thanksgiving and Christmas recesses.

The question was asked: Is this type of service really worthwhile? The philosophy of the Oklahoma State University Food Service was that a centralized facility was already servicing other food units, so why not help another area of the University. A great deal of information has been attained regarding delivery service and ordering procedures. This program has helped Food Service "keep in touch" with the Student Affairs Office, which is a vital communication link with on-campus students, as well as the fraternities and the sororities.

TABLE II

POPULARITY OF BAKERY PRODUCTS - SHOWN BY QUANTITY ORDERED

Bakery Products	Unit of Purchase	Weeks																	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Breakfast Rolls	Dozen	39.0	38.0	52.0	56.0	64.0	72.0	54.0	42.0	67.0	62.0	62.0	62.0	30.0	61.0	67.0	70.5	36.0	934.5
Pies	Each	12.0	6.0	4.0	9.0				16.0				5.0		3.0	5.0		7.0	67.0
Cakes	Each	13.0	24.0	16.0	13.0		13.0				37.0		19.0		19.0	12.0	16.0		182.0
Pie Crusts	Each	3.0	3.0	3.0						12.0	4.0			36.0					61.0
Misc. Products	Dozen	2.0											8.0						10.0
Breads	Dozen			3.0	8.0		2.5												13.5

In the future, it may be necessary for the Greek Living Units and the University Food Service to make further adjustments because of changing living concepts. The policy will be as flexible as possible for whatever changes develop.

CHAPTER V

SUMMARY AND CONCLUSIONS

A pilot bakery program for ten GLU and the OSU Fire Station was planned and put into effect in Fall 1972. A cycle menu was written for the GLU and was coordinated with the Residence Halls Cycle Menu II. Changes were made throughout the Fall Semester so that the program could be offered to all fraternities and sororities during Spring 1973.

The Oklahoma State University Central Bakery is an integral part of the total Residence Halls Food Service. The bakery is a service unit that supplies the OSU Residence Halls, Iba Hall (athletic dormitory), and the Dairy Salesroom with high quality, standardized products.

It appeared to the Central Bakery Manager, through familiarity with operations, that the bakery service to the residence halls could be improved by modifying the cycle menu. As a result of improving residence halls services, a bakery program could be offered to fraternities and sororities. Therefore, the purposes of this research were to modify the present central bakery cycle menu used in the OSU Residence Halls, and to offer the bakery services to the residents of fraternities and sororities.

The bakery cycle menu was developed in three different stages: Bakery Cycle Menu I (Fall and Spring 1971), Bakery Cycle Menu II (Early Fall 1972), and Bakery Cycle Menu III (Late Fall 1972). Changes made in product number, variety, ordering sizes and cycle format helped the

Central Bakery to become a more functional service area for the RHFS. Managers and supervisors who had direct contact with the customers were able to indicate customer preferences to the Central Bakery Manager. These preferences after being analyzed in regard to production feasibility, were worked into the "flexible" cycle menu. Changes in Bakery Cycle Menu III incorporated many new product ingredients and ideas.

Schedules should be evaluated for distribution of work load, job responsibilities, and use of full-time in comparison to part-time employees. There should be a certain amount of flexibility in scheduling. The schedule that was used for an early morning bakery shift may not work as well for a late shift. Offering a variety of bakery products for the RHFS was a necessity because of the type of clientele being served.

Recommendations for Future Studies

This research has uncovered a number of areas that can be used for future studies. It is proposed to have Bakery Cycle Menu III weekly evaluated with assistance from managers and supervisors. As changes are made on the bakery cycle menu, management must continually evaluate employee schedules. Continued interest should be shown in product experimentation and evaluation in order for new recipes to be incorporated on the cycle menu or used for special dinners. To complete the purchasing program for the GLU, services from the OSU Food Center could include dairy and produce items. The development of GLU entree and vegetable cycle menus could be coordinated with those used by the residence halls. The feasibility of preparing GLU meals by RHFS and having these meals transported to each of the GLU also could be studied.

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APPENDIXES

ARKANSAS STATE UNIVERSITY

Forest Dept.

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APPENDIX A

OSU RESIDENCE HALLS BAKERY CYCLE MENU I

FALL AND SPRING 1971

OSU RESIDENCE HALLS BAKERY CYCLE MENU I

WEEK #1

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Cherry Sweet Rolls Chocolate Bars	Raised Donuts Jelly Filled Donuts Apple Sweet Rolls	Cake Donuts Lemon Sweet Rolls Maple Bars	Raised Donuts Baked Cinnamon Rolls Twists	Raised Donuts Pineapple Sweet Rolls Fried Cinnamon Rolls	Raised Donuts Fried Cinnamon Rolls Coffee Cake	Raised Donuts Maple Bars Cherry Sweet Rolls
CAKES:						
Chocolate/Chocolate Icing Spice/Caramel Icing	Chocolate/White Icing Yellow/Yellow Icing	Red Earth/Chocolate Icing Carrot	Banana Nut/Banana Icing Chocolate/White Icing/Chocolate Drippings	Pink and White/Pink Icing Chocolate/Toffee Icing	German Chocolate Lime Angel Food/ Lime Green Icing	Red Earth/Chocolate Icing Oatmeal
PIES:						
Apple Cherry Pineapple	Apple Crumb Cherry Mince Meat	Apple Pinecot Boysenberry	Apple Strawberry Rhubarb Blueberry	Peach Cherry Raisin	Apple Cherry Pumpkin	Apple Cherry Peach
MISCELLANEOUS:						
Peanut Butter Cookies Peach Cobbler	Chocolate Brownies Sugar Cookies	Gingerbread Cherry Ambrosia	Hunters Pudding Raspberry Jelly Roll	Chocolate Chip Cookies Apple Crisp	Cowboy Cookies Pineapple Ice Box Pudding	Holiday Crumb Cookies German Chocolate Pudding
BREAD:						
Pan Rolls Blueberry Muffins Cornbread	Pan Rolls Cornbread Cinnamon Muffins	Pan Rolls Poppy Seed Rolls Corn Muffins	Pan Rolls Bacon Muffins French Bread	Pan Rolls Fruit Muffins Cornbread	Twin Rolls Plain Muffins Submarine Buns	Pan Rolls Dutch Apple Muffins Dilly Bread

OSU RESIDENCE HALLS BAKERY CYCLE MENU I

WEEK #2

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Baked Cinnamon Rolls Twists	Raised Donuts Fried Cinnamon Rolls Pineapple Sweet Rolls	Chocolate Cake Donuts Jelly Filled Donuts Apple Sweet Rolls	Raised Donuts Chocolate Bars Lemon Sweet Rolls	Raised Donuts Twists Raspberry Sweet Rolls	Caramel Cake Donuts Fried Cinnamon Rolls Iced Sweet Rolls	Raised Donuts Coffee Cake Baked Cinnamon Rolls/ Icing
CAKES:						
Chocolate/Chocolate Icing Lemon/Lemon Icing	Chocolate/White Icing Orange Chip/Orange Coconut Icing	Chocolate/Chocolate Icing Cherry Classic/Cherry Icing	Chocolate/Maple Icing South Pacific/White Icing	Raisin Nut/Butter Cream Icing Red Earth/Chocolate Icing	Cherry Angel Food/ Cherry Icing Chocolate/Chocolate Icing	German Chocolate Lemon Filled White/ White Icing
PIES:						
Apple Blackberry Cherry	Dutch Apple Cherry Apricot	Apple Boysenberry Chess	Cherry Apple Raisin Peach	Blushing Apple Cherry Blueberry	Apple Cherry Raisin	Pineapple Apricot Turnover Pecan
MISCELLANEOUS:						
Cream Puffs Peanut Butter Goldfingers	Hot Fudge Pudding Oatmeal Raisin Cookies	Gingersnaps Cherry Cobbler	Orange Bars Apple Cobbler	Chocolate Brownies Lemon Cake Pudding	Spice Roll/ Butterscotch Filling	Cherry Boston Cream Pie Apple Cheese Crisp
BREAD:						
Pan Rolls Cornbread Cheese Muffins	Poppy Seed Rolls French Bread Corn Muffins	Pan Rolls Nut Muffins Cornbread	Twin Rolls Cornbread Pineapple Muffins	Pan Rolls Plain Muffins	Pan Rolls Old Fashioned Home Type Bread Submarine Buns	Muffin Rolls Sesame Seed Rolls Blueberry Muffins

OSU RESIDENCE HALLS BAKERY CYCLE MENU I

WEEK #3

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Fried Cinnamon Rolls Lemon Bars	Cake Donuts Jelly Filled Donuts Cherry Sweet Rolls	Raised Donuts Fried Cinnamon Rolls Chocolate Bars	Raised Donuts Baked Cinnamon Rolls Twists	Cake Donuts Fried Cinnamon Rolls Sweet Rolls/White Icing	Raised Donuts Twists Baked Cinnamon Rolls	Raised Donuts Hot Cross Buns Raspberry Sweet Rolls
CAKES:						
Chocolate/Chocolate Icing Butterscotch/ Butterscotch Icing	White/Boiled White Icing/Chocolate Drops Pineapple Upside Down	Chocolate/Royal Icing Pound/Butter Cream Icing	Chocolate Banana/ Chocolate Icing Apple Dilly	Red Earth/Chocolate Icing Champagne	Chocolate/White Butter Icing Orange/Orange Icing	White/Coconut Icing Red Earth/Chocolate Icing
PIES:						
Raisin Apple Cherry Pineapple	Dutch Apple Cherry Boysenberry	Apple Cherry Apricot	Apple Cherry Pumpkin	Mince Meat Peach Pineapple	Apple Cherry Blackberry	Apple Royal Coconut Boysenberry
MISCELLANEOUS:						
Peach Cobbler Crispy Crumb Cookies	Chocolate Boston Cake/Chocolate Filling Orange Nut Ginger Bars	Pineapple Raisin Cookies Eclairs/Vanilla Cream Filling	Lemon Filled Jelly Roll German Chocolate Brownies	Cherry Crisp Apple Dumplings	Gingerbread Date Bars Delight	Peanut Butter Icebox Cookies Cherry Delight
BREAD:						
Pan Rolls Jelly Muffins Cornbread	Pan Rolls French Bread Corn Muffins	Cloverleaf Rolls Poppy Seed Rolls Cornbread	Whole Wheat Rolls Pan Rolls Plain Muffins	Pan Rolls Blueberry Muffins Cornbread	Pan Rolls Submarine Buns French Bread	Date Nut Bread Hard Rolls Twin Rolls

OSU RESIDENCE HALLS BAKERY CYCLE MENU I

WEEK #4

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts	Cake Donuts	Raised Donuts	Raised Donuts	Sugared Cake Donuts	Raised Donuts	Bear Claws
Jelly Filled Donuts	Fried Cinnamon Rolls	Baked Cinnamon Rolls	Pineapple Sweet Rolls	Baked Cinnamon Rolls	Sweet Rolls/Butter	Raised Donuts
Baked Cinnamon Rolls	Maple Bars	Twists	Chocolate Bars	Twists	Cream Icing	Coffee Cake
					Jelly Filled Donuts	
CAKES:						
Chocolate/Caramel Icing	Red Earth/Chocolate Icing	Chocolate/Chocolate Cream Icing	Yellow/Chocolate Royal Icing	Mahogany/Seven Minute Icing	Chocolate Marble/Butter Cream Icing	Pineapple Delight
Golden Honey Comb	Butter Rum/Burnt Sugar Icing	Applesauce/Caramel Icing/Nuts	Cherry Nut/Cherry Nut Icing	Lazy Daisy	Windsor Gold/Chocolate Icing	Angel Food/White Icing/Toasted Almonds
PIES:						
Apple	Apple	Apple Crumb	Apple	Sour Cream Apple	Apple	Apple
Cherry	Cherry	Apricot	Pineapple	Cherry	Cherry	Boysenberry
Chess	Pumpkin	Blackberry	Peach	Mince Meat	Blueberry	Maple Coconut
MISCELLANEOUS:						
Butter Cookies	Graham Cracker Fruit Fluff	Ranger Cookies	German Chocolate Pudding	Strawberry Cobbler Cake	Pineapple Bavarian Cream	Chocolate Sponge Roll/Mint Filling
Boysenberry Cobbler	Peach Turnover	Cherry Pudding Cake	Peanut Cake Squares	Gumdrop Spice Bar	Butterscotch Brownies	Cheese Cake/Cherry Sauce
BREAD:						
Pan Rolls	Muffin Rolls	Pan Rolls	Pan Rolls	Twin Rolls	Pan Rolls	Cloverleaf Rolls
Raisin Muffins	Cornbread	Sesame Seed Rolls	French Bread	Cornbread	Poppy Seed Rolls	Corn Muffins
Mexican Cornbread	Dilly Bread	Apple Muffins	Bacon Muffins	Submarine Buns	Cornbread	

APPENDIX B

CENTRAL BAKERY EQUIPMENT

FALL 1972

OSU CENTRAL BAKERY EQUIPMENT LIST
FALL 1972

NAME	NUMBER	USE
Glen Mixer, Model 74-57. The mixer comes with whips, paddle and dough hook and has 40, 80 and 160 quart bowl attachments with inserts.	3	Mixing fruit fillings, cakes, doughs, cookies, etc.
Simplex water meter, style SWM by Glen Mixer.	2	Eliminates the need of measuring and carrying water back and forth to the mixer. Weighs in two ounces and one pound segments.
Hobart, model A200-D 20-quart mixer with attachments. It is a 3-speed table model mixer.	1	Mixing small quantity recipes.
Kotten Dandy Cake Depositor.	1	This machine can fill sheet pans, round cake pans and muffin tins by changing the deposit die.
Champion Model 65 Cookie Dropper.	1	Can produce up to 1,200 dozen cookies per hour. Various cookie shapes can be obtained by the use of different dies and the cookie size can also be varied.
Budgit, Model J-332-3 electric hoist, 1,000 pound capacity.	1	Hoists and moves bowls filled with dough or batter to the proper production area.

NAME	NUMBER	USE
Atwood Scalomatic Dough Divider.	2	Can scale dough into pieces from 1 ounce to 28 ounces. It also includes a dough rounder which can be lowered for use as a rounder, or lifted upwards if the pieces are not to be rounded.
3-Compartment Federal Dough Retarder	1	This box holds a constant temperature between 33-37° F. to keep the yeast in various doughs from acting.
Anets Model 3, 2-compartment, proofbox. Wet heat (steam).	1	Proofs bread, sweet rolls, etc. to be baked.
Welder 2-compartment proofer. Dry heat.	1	This is used for proofing doughnuts and other breakfast products that need to be fried. Dry heat proofing will help reduce breakdown of fat from water contact.
Groen, Model MW/D 40-gallon steam jacket kettle.	1	Used for making large quantities of cooked fruit fillings, puddings, cake toppings, and other cooked products that are on the cycle menu.
Groen, Model TDB 14-20 40-quart steam-jacket kettle table model.	1	Used for making small quantities of cooked bakery products.

NAME	NUMBER	USE
Middleby-Marshall Model 725 heavy-duty revolving tray ovens.	2	Bakes all of the Bakery products.
Kaiser Aluminum Hydro-Matic Pie Press.	1	Makes pie, tart or other size shells depending upon the die being used.
Pie Baker's Machinery, pie crust roller.	1	Rolls dough pieces out for the top crust of pies and cobblers.
Ever-rite Model 12 FT6 Donut sheeter and cutter.	1	Used for automatically cutting doughnuts.
Bissc-Certified, Model 9, Dough Sheeter.	1	Rolls pieces of sweet dough, raised doughnut dough, etc. into desired thickness.
Belshaw Brothers, Inc. Donut Fryer and Glazer Assembly.	1	Automatically fries and glazes breakfast rolls.
Thesco-Schmidt walk-in refrigerator, freezer and flash-freezer.	1 of each	Refrigeration and freezing of various bakery products.
Ramco Model Rackmaster Potwasher.	1	Washes racks, carts, various bakery pans and anything else that is movable and washable in the Bakery.

NAME	NUMBER	USE
Cres-Cor, Crescent Metal Enclosed Cart.	40	Enclosed 17-shelf cart that is used for storage and delivery of Bakery products to the Residence Halls.
Cres-Cor Crescent Metal Cabinets.	46	Cabinets for delivering pies to the Residence Halls. The cabinets have a 10-pie capacity.
Truck, enclosed.	1	Bakery delivery to the Residence Halls Food Service.

APPENDIX C

CENTRAL BAKERY EMPLOYEE SCHEDULE

FALL 1972

BY LACROSSE STATE UNIVERSITY

THIRD FLOOR

1015 CORVALLIS BLVD

BAKERY EMPLOYEE SCHEDULE FOR FALL 1972

EMPLOYEE TITLE AND RESPONSIBILITIES	WORKING SCHEDULE	NAME OF EMPLOYEE
<u>Full-time Employees:</u>		
Manager	Flexible	Caren Messina
Production Supervisor	Monday-Friday 3:00 a.m.-11:00 a.m.	Wendell Ely
Baker II	Monday-Friday 1:00 a.m.-9:00 a.m.	Harvey Johnson
Baker I - Breakfast Rolls, Cakes	Monday-Friday 12:00 a.m.-8:00 a.m.	Bobby Campbell
Baker I - Fruit Pies, Cobblers, Crisps	Monday-Friday 2:30 a.m.-10:30 a.m.	Nina Trout
Baker I - Miscellaneous Items, Breakfast Rolls, Pie Crusts	Monday-Friday 2:30 a.m.-10:30 a.m.	Joyce Potts
Baker I - Dinner Rolls	Monday-Friday 1:30 a.m.-9:30 a.m.	Bernice Head
Baker I - Cakes	Monday-Friday 2:00 a.m.-10:00 a.m.	Tony O'Bryan
Baker's Aide - Breakfast Rolls	Monday-Friday 2:30 a.m.-10:30 a.m.	Emma Bowick
Residence Halls Delivery - Bakery Sanitation	Monday-Friday 4:00 a.m.-12:00 p.m.	Glenn Percell
Baker's Aide	Monday-Friday 2:30 a.m.-10:30 a.m.	Open
<u>Part-time Employees:</u>		
Residence Halls Delivery	Monday-Friday 4:30 a.m.-8:30 a.m., Saturday 4:30 a.m.-7:00 a.m.	Steven Benson
Saturday Morning Production	2:30 a.m.-6:45 a.m.	Felix Rengel
Bakery Sanitation	Monday-Friday 1:00 p.m.-5:00 p.m.	Dean Martin

EMPLOYEE TITLE AND RESPONSIBILITIES	WORKING SCHEDULE	NAME OF EMPLOYEE
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Part-time Employees, Continued

Equipment Pickup	Monday-Friday 4:45 p.m.-6:30 p.m.	Ken Tollison Greg Nesmith
Fraternity and Sorority Delivery	Monday-Friday 6:15 a.m.-7:15 a.m.	Terry Scott

APPENDIX D

OSU RESIDENCE HALLS BAKERY CYCLE MENU II

EARLY FALL 1972

OSU RESIDENCE HALLS BAKERY CYCLE MENU II

WEEK #1

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Cherry Sweet Rolls Chocolate Bars	Raised Donuts Jelly Filled Donuts Apple Sweet Rolls	Raised Donuts Lemon Sweet Rolls Chocolate Cake Donuts	Raised Donuts Baked Cinnamon Rolls Twists	Raised Donuts Pineapple Sweet Rolls Maple Bars	Sugared Cake Donuts Baked Cinnamon Rolls	Cherry Danish Cinnamon Coffee Cake
CAKES:						
Chocolate/Chocolate Icing	Yellow/Yellow Icing	Red Earth/Chocolate Icing	Banana Nut/Banana Icing	Chocolate/Toffee Icing	Oatmeal	German Chocolate
PIES:						
Apple Cherry Coconut Cream	Apple Crumb Boysenberry Butterscotch Cream	Apple Pinecot Chocolate Cream	Apple Pineapple Bavarian Blueberry	Peach Cherry Lemon Crunch	Apricot Pumpkin Strawberry Whip and Chill	Pineapple Cherry Chocolate Cream
MISCELLANEOUS:						
Peanut Butter Cookies Peach Cobbler	Chocolate Brownies Cream Puffs/Vanilla Filling/Powdered Sugar	Gingerbread Orange Bars	Raspberry Jelly Roll	Chocolate Chip Cookies	Cherry Crisp	Ranger Cookies
BREAD:						
Pan Rolls Blueberry Muffins	Pan Rolls Sesame Seed Rolls	Pan Rolls Cornbread	Pan Rolls French Bread	Pan Rolls Plain Muffins	Pan Rolls Submarine Buns	Pan Rolls Dilly Bread

OSU RESIDENCE HALLS BAKERY CYCLE MENU II

WEEK #2

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Baked Cinnamon Rolls Chocolate Bars	Raised Donuts Fried Cinnamon Rolls Pineapple Sweet Rolls	Raised Donuts Chocolate Cake Donuts Apple Sweet Rolls	Raised Donuts Chocolate Bars Lemon Sweet Rolls	Raised Donuts Twists Raspberry Sweet Rolls	Banana Nut Bread Pineapple Danish	Sugared Cake Donuts Apple Nut Muffins
CAKES:						
Lemon/Lemon Icing	Chocolate/Chocolate Icing	Orange/Orange Icing and Coconut	Chocolate/White Icing/Chocolate Drippings	Cherry Classic/Cherry Icing	Chocolate Banana/ Chocolate Icing	Lemon Filled White/ White Icing
PIES:						
Apple Blackberry Pineapple Cream	Dutch Apple Cherry Chess	Apple Apricot Banana Cream	Cherry Apple Raisin Chocolate Bavarian	Peach Pineapple Lemon Cream	Apple Cherry Coconut Cream	Blushing Apple Pecan Blueberry Bavarian
MISCELLANEOUS:						
Peanut Butter Goldfingers Hunters Pudding	Oatmeal Cookies Peach Turnovers	Hot Fudge Pudding Cherry Cobbler	Apple Cobbler	Chocolate Brownies Coconut Macaroons	Spice Roll/ Butterscotch Pudding	Apple Crisp
BREAD:						
Pan Rolls Cornbread	Poppy Seed Rolls French Bread	Pan Rolls Pineapple Muffins	Cloverleaf Rolls Pan Rolls	Pan Rolls Plain Muffins	Cloverleaf Rolls French Bread	Pan Rolls Blueberry Muffins

OSU RESIDENCE HALLS BAKERY CYCLE MENU II

WEEK #3

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Fried Cinnamon Rolls Pineapple Sweet Rolls	Raised Donuts Jelly Filled Donuts Cherry Sweet Rolls	Raised Donuts Fried Cinnamon Rolls Chocolate Bars	Raised Donuts Baked Cinnamon Rolls Twists	Raised Donuts Raspberry Sweet Rolls Fried Cinnamon Rolls	Apple Coffee Cake Sugared Cake Donuts	Raisin Nut Bread Baked Cinnamon Rolls
CAKES:						
Chocolate/Chocolate Icing	Spice/Caramel Icing	Chocolate/White Icing	Pound/Butter Cream Icing	Red Earth/Chocolate Icing	Orange/Orange Icing	Double Chocolate Fudge/Chocolate Fudge Icing
PIES:						
Apple Cherry Pineapple Bavarian	Dutch Apple Boysenberry Strawberry Whip and Chill	Apple Strawberry-Rhubarb Coconut Cream	Cherry Pumpkin Lemon Crunch	Mincemeat Peach - Single Crust/ Whipped Topping Banana Cream	Apple Blackberry Chocolate Cream	Cherry Royal Coconut Peach Bavarian
MISCELLANEOUS:						
Peach Cobbler	Chocolate Boston Cake/Chocolate Filling	Cinnamon Nut Cookies Eclairs/Vanilla Cream Filling	German Chocolate Brownies Apple Souffle	Cherry Crisp Apple Dumplings	Gingerbread	Peanut Butter Icebox Cookies
BREAD:						
Pan Rolls Sesame Seed Rolls	Pan Rolls French Bread	Buttermilk Biscuits Poppy Seed Rolls	Whole Wheat Rolls Pan Rolls	Pan Rolls Blueberry Muffins	Pan Rolls French Bread	Sour Dough Hard Rolls Twin Rolls

OSU RESIDENCE HALLS BAKERY CYCLE MENU II.

WEEK #4

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
<u>BREAKFAST ROLLS:</u>						
Raised Donuts Jelly Filled Rolls Lemon Sweet Rolls	Raised Donuts Fried Cinnamon Rolls Maple Bars	Raised Donuts Baked Cinnamon Rolls Twists	Raised Donuts French Bread Chocolate Bars	Raised Donuts Twists Fried Cinnamon Rolls	Raspberry Danish Sugared Cake Donuts	Coffee Cake Baked Cinnamon Rolls
<u>CAKES:</u>						
Butter Rum	Dutch Chocolate/ White Icing	Golden Honey Comb	Chocolate Butter Mallow	Carrot/Cream Cheese Icing	Chocolate Marble/ White Icing	Angel Food/White Icing and Toasted Almonds
<u>PIES:</u>						
Apple Cherry Pineapple Cream	Cherry Pumpkin Lemon Bavarian	Apple Crumb Blackberry Strawberry Whip and Chill	Apple Peach Coconut Cream	Sour Cream Apple Cherry Chocolate Bavarian	Cherry Blueberry Banana Cream	Apple Pineapple Pumpkin Chiffon
<u>MISCELLANEOUS:</u>						
Coconut Macaroons	Apple Betty	Chocolate Chip Cookies	Peanut Cake Squares Cherry Boston	Strawberry Cobbler Cake	Butterscotch Brownies	Cheese Cake/Cherry Sauce
<u>BREAD:</u>						
Pan Rolls Sesame Seed Rolls	Muffin Rolls Dilly Bread	Pan Rolls Sesame Seed Rolls	Pan Rolls French Bread	Cloverleaf Rolls Submarine Buns	Submarine Buns Poppy Seed Rolls	Pan Rolls

OSU RESIDENCE HALLS BAKERY CYCLE MENU II

WEEK #5

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Cherry Sweet Rolls Chocolate Bars	Raised Donuts Apple Sweet Rolls Jelly Filled Donuts	Raised Donuts Lemon Sweet Rolls Chocolate Cake Donuts	Raised Donuts Baked Cinnamon Rolls Twists	Raised Donuts Pineapple Sweet Rolls Maple Bars	Sugared Cake Donuts Baked Cinnamon Rolls	Cherry Danish Cinnamon Coffee Cake
CAKES:						
Chocolate/Chocolate Icing	Applesauce/Caramel Icing	Red Earth/Chocolate Icing	Banana Nut/Banana Icing	Chocolate/Toffee Icing	Peanut Butter/Peanut Butter Icing	German Chocolate
PIES:						
Apple	Apple Crumb Boysenberry	Apple Pinecot	Blueberry Apple Pineapple Bavarian	Peach Lemon Crunch	Apricot Pumpkin	Cherry
MISCELLANEOUS:						
Peanut Butter Cookies Peach Cobbler	Chocolate Brownies	Orange Bars	Raspberry Jelly Roll	Apple Souffle Chocolate Chip Cookies	Cherry Crisp	Ranger Cookies
BREAD:						
Pan Rolls Blueberry Muffins	Pan Rolls Sesame Seed Rolls	Pan Rolls Cornbread	Pan Rolls French Bread	Pan Rolls 4" Hamburger Buns/ Onion Top	Pan Rolls Buttermilk Biscuits	Pan Rolls

APPENDIX E

GLU BAKERY CYCLE MENU

EARLY FALL 1972

GLU BAKERY CYCLE MENU

WEEK NO. OF THE CYCLE: 1
 DATES: August 28 - September 3

DAY: MONDAY DATE: AUGUST 28				DAY: FRIDAY DATE: SEPTEMBER 1			
ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER	ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER
Breakfast Roll Raised Donut Cake Chocolate/Chocolate Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Pineapple Sweet Roll Cake Pie Cherry Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut	
Miscellaneous Peanut Butter Cookies Bread Pan Rolls	Dozen Dozen	2 each 2 each		Miscellaneous Chocolate Chip Cookies Bread Pan Rolls	Dozen Dozen	2 each 2 each	
DAY: TUESDAY DATE: AUGUST 29				DAY: SATURDAY DATE: September 2			
Breakfast Roll Apple Sweet Roll Cake Pie Apple Crumb Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut		Breakfast Roll Sugared Cake Donut Cake Pie Pumpkin Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut	
Miscellaneous Bread Sesame Seed Pan Rolls	Dozen	2 each		Miscellaneous Bread Pan Rolls	Dozen	2 each	
DAY: WEDNESDAY DATE: AUGUST 30				DAY: SUNDAY DATE: SEPTEMBER 3			
Breakfast Roll Chocolate Cake Donut Cake Red Earth/Chocolate Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Cherry Danish Cake German Chocolate Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut	
Miscellaneous Bread Pan Rolls	Dozen	2 each		Miscellaneous Bread Pan Rolls	Dozen	2 each	
DAY: THURSDAY DATE: AUGUST 31				DAY: DATE:			
Breakfast Roll Raised Donut Cake Banana Nut/Banana Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut					
Miscellaneous Bread Cloverleaf Rolls	Dozen	2 each					

*Pie crusts are offered each day.
 Fruit pies may be purchased frozen, unbaked - please specify.

GLU BAKERY CYCLE MENU

WEEK NO. OF THE CYCLE: 2

DATES: September 4-10

DAY: MONDAY DATE: SEPTEMBER 4				DAY: FRIDAY DATE: SEPTEMBER 8			
ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER	ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER
Breakfast Roll Baked Cinnamon Roll Cake Lemon/Lemon Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Twist Cake Pie Pineapple Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut	
Miscellaneous Bread Pan Rolls	Dozen	2 each		Miscellaneous Bread Pan Rolls	Dozen	2 each	
DAY: TUESDAY DATE: SEPTEMBER 5				DAY: SATURDAY DATE: SEPTEMBER 9			
Breakfast Roll Fried Cinnamon Roll Cake Pie Cherry Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut		Breakfast Roll Pineapple Danish Cake Chocolate Banana/Chocolate Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut	
Miscellaneous Bread Poppy Seed Pan Rolls	Dozen	2 each		Miscellaneous Bread Cloverleaf Rolls	Dozen	2 each	
DAY: WEDNESDAY DATE: SEPTEMBER 6				DAY: SUNDAY DATE: SEPTEMBER 10			
Breakfast Roll Chocolate Cake Donut Cake Orange/Orange Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Sugared Cake Donut Cake Pie Pecan Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut	
Miscellaneous Bread Pan Rolls	Dozen	2 each		Miscellaneous Bread Blueberry Muffins	Dozen	1 each	
DAY: THURSDAY DATE: SEPTEMBER 7				DAY: DATE:			
Breakfast Roll Raised Donut Cake Chocolate/White Icing & Chocolate Drippings Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut					
Miscellaneous Bread Cloverleaf Rolls	Dozen	2 each					

*Pie crusts are offered each day.
Fruit pies may be purchased frozen, unbaked - please specify.

GLU BAKERY CYCLE MENU

WEEK NO. OF THE CYCLE: 3

DATES: September 11-17

DAY: MONDAY DATE: SEPTEMBER 11				DAY: FRIDAY DATE: SEPTEMBER 15			
ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER	ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER
Breakfast Roll Raised Donut Cake	Dozen	1 each		Breakfast Roll Raised Donut Cake	Dozen	1 each	
Pie Apple Pie Crust - Raw Each*	10"	8 cut		Red Earth/Chocolate Icing Pie Pie Crust - Raw Each*	9"-2 layer round	16 cut	
Miscellaneous				Miscellaneous			
Bread Pan Rolls	Dozen	2 each		Bread Pan Rolls	Dozen	2 each	
DAY: TUESDAY DATE: SEPTEMBER 12				DAY: SATURDAY DATE: SEPTEMBER 16			
Breakfast Roll Cherry Sweet Roll Cake Spice/Caramel Icing Pie	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Sugared Cake Donut Cake Orange/Orange Icing Pie	Dozen 9"-2 layer round	1 each 16 cut	
Pie Crust - Raw Each*				Pie Crust - Raw Each*			
Miscellaneous				Miscellaneous			
Bread Pan Rolls	Dozen	2 each		Bread Uncut French Bread	Loaf		
DAY: WEDNESDAY DATE: SEPTEMBER 13				DAY: SUNDAY DATE: SEPTEMBER 17			
Breakfast Roll Fried Cinnamon Roll Cake Chocolate/White Icing Pie	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Baked Cinnamon Roll Cake	Dozen	1 each	
Pie Crust - Raw Each*				Pie Cherry Pie Crust - Raw Each*	10"	8 cut	
Miscellaneous				Miscellaneous			
Bread Heat and Eat Buttermilk Biscuits	Case - 240/case	2 each		Bread Frozen Heat and Eat Sour Dough Hard Rolls	Case - 120/case	1 each	
DAY: THURSDAY DATE: SEPTEMBER 14							
Breakfast Roll Twist Cake	Dozen	1 each					
Pie Pumpkin Pie Crust - Raw Each*	10"	8 cut					
Miscellaneous							
Bread Whole Wheat Rolls	Dozen	2 each					

*Pie crusts are offered each day.
Fruit pies may be purchased frozen, unbaked - please specify.

GLU BAKERY CYCLE MENU

WEEK NO. OF THE CYCLE: 4

DATES: September 18-24

DAY: MONDAY DATE: SEPTEMBER 18				DAY: FRIDAY DATE: SEPTEMBER 22			
ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER	ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER
Breakfast Roll Jelly Filled Donut Cake	Dozen	1 each		Breakfast Roll Twist Cake	Dozen	1 each	
Pie Cherry Pie Crust - Raw Each*	10"	8 cut		Pie Cherry Pie Crust - Raw Each*	10"	8 cut	
Miscellaneous Coconut Macaroons	Dozen	3 each		Miscellaneous			
Bread Sesame Seed Pan Rolls	Dozen	2 each		Bread Cloverleaf Rolls	Dozen	2 each	
DAY: TUESDAY DATE: SEPTEMBER 19				DAY: SATURDAY DATE: SEPTEMBER 23			
Breakfast Roll Maple Bar Cake Dutch Chocolate/White Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut		Breakfast Roll Raspberry Danish Cake Chocolate Marble/White Icing Pie Pie Crust - Raw Each*	Dozen 9"-2 layer round	1 each 16 cut	
Miscellaneous				Miscellaneous			
Bread Muffin Rolls	Dozen	2 each		Bread Submarine Buns (4-5")	Dozen	1 each	
DAY: WEDNESDAY DATE: SEPTEMBER 20				DAY: SUNDAY DATE: SEPTEMBER 24			
Breakfast Roll Baked Cinnamon Roll Cake Pie Apple Crumb Pie Crust - Raw Each*	Dozen 10"	1 each 8 cut		Breakfast Roll Baked Cinnamon Roll Cake Angel Food/White Icing and Almonds Pie Pie Crust - Raw Each*	Dozen Angel food shape	1 each 16 cut	
Miscellaneous Chocolate Chip Cookies	Dozen	2 each		Miscellaneous			
Bread Pan Rolls	Dozen	2 each		Bread Pan Rolls	Dozen	2 each	
DAY: THURSDAY DATE: SEPTEMBER 21				DAY: DATE:			
Breakfast Roll Raised Donut Cake Cherry Boston Yellow Layer/ Cherry Topping Pie Pie Crust - Raw Each*	Dozen 9" single	1 each 8 cut					
Miscellaneous							
Bread Uncut French Bread	Loaf						

*Pie crusts are offered each day.
Fruit pies may be purchased frozen, unbaked - please specify.

GLU BAKERY CYCLE MENU

WEEK NO. OF THE CYCLE: 5

DATES: September 25 - October 1

DAY: MONDAY DATE: SEPTEMBER 25				DAY: FRIDAY DATE: SEPTEMBER 29					
ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER	ITEM	UNIT OF PURCHASE	PORTION SIZE	ORDER		
Breakfast Roll	Dozen	1 each		Breakfast Roll	Dozen	1 each			
Raised Donut				Raised Donut					
Cake				Cake					
Pie	10"	8 cut		Chocolate/Toffee Icing	9"-2 layer round	16 cut			
Apple				Pie					
Pie Crust - Raw Each*				Pie Crust - Raw Each					
Miscellaneous				Miscellaneous					
Bread				Chocolate Chip Cookies	Dozen	2 each			
Blueberry Muffins	Dozen	1 each		Bread	Dozen	2 each			
				Pan Rolls					
DAY: TUESDAY DATE: SEPTEMBER 26				DAY: SATURDAY DATE: SEPTEMBER 30					
Breakfast Roll	Dozen	1 each		Breakfast Roll	Dozen	1 each			
Jelly Filled Donut				Sugared Cake Donut					
Cake				Cake					
Applesauce/Caramel Icing	9"-2 layer round	16 cut		Pie	10"	8 cut			
Pie				Pumpkin					
Pie Crust - Raw Each*				Pie Crust - Raw Each*					
Miscellaneous				Miscellaneous					
Bread				Bread	Case - 240/case	2 each			
Sesame Seed Pan Rolls	Dozen	2 each		Frozen Heat and Eat Buttermilk Biscuits					
DAY: WEDNESDAY DATE: SEPTEMBER 27				DAY: SUNDAY DATE: OCTOBER 1					
Breakfast Roll	Dozen	1 each		Breakfast Roll	Dozen	1 each			
Chocolate Cake Donuts				Cherry Danish					
Cake				Cake					
Red Earth/Chocolate Icing	9"-2 layer round	16 cut		Pie	10"	8 cut			
Pie				Cherry					
Pie Crust - Raw Each*				Pie Crust - Raw Each*					
Miscellaneous				Miscellaneous	Dozen	2 each			
Bread				Ranger Cookies	Dozen	2 each			
Pan Rolls	Dozen	2 each		Bread	Dozen	2 each			
				Pan Rolls					
DAY: THURSDAY DATE: SEPTEMBER 28				DAY: DATE:					
Breakfast Roll	Dozen	1 each							
Twist									
Cake									
Pie	10"	10 cut							
Pineapple Bavarian									
Pie Crust - Raw Each*									
Miscellaneous									
Bread									
Pan Rolls	Dozen	2 each							

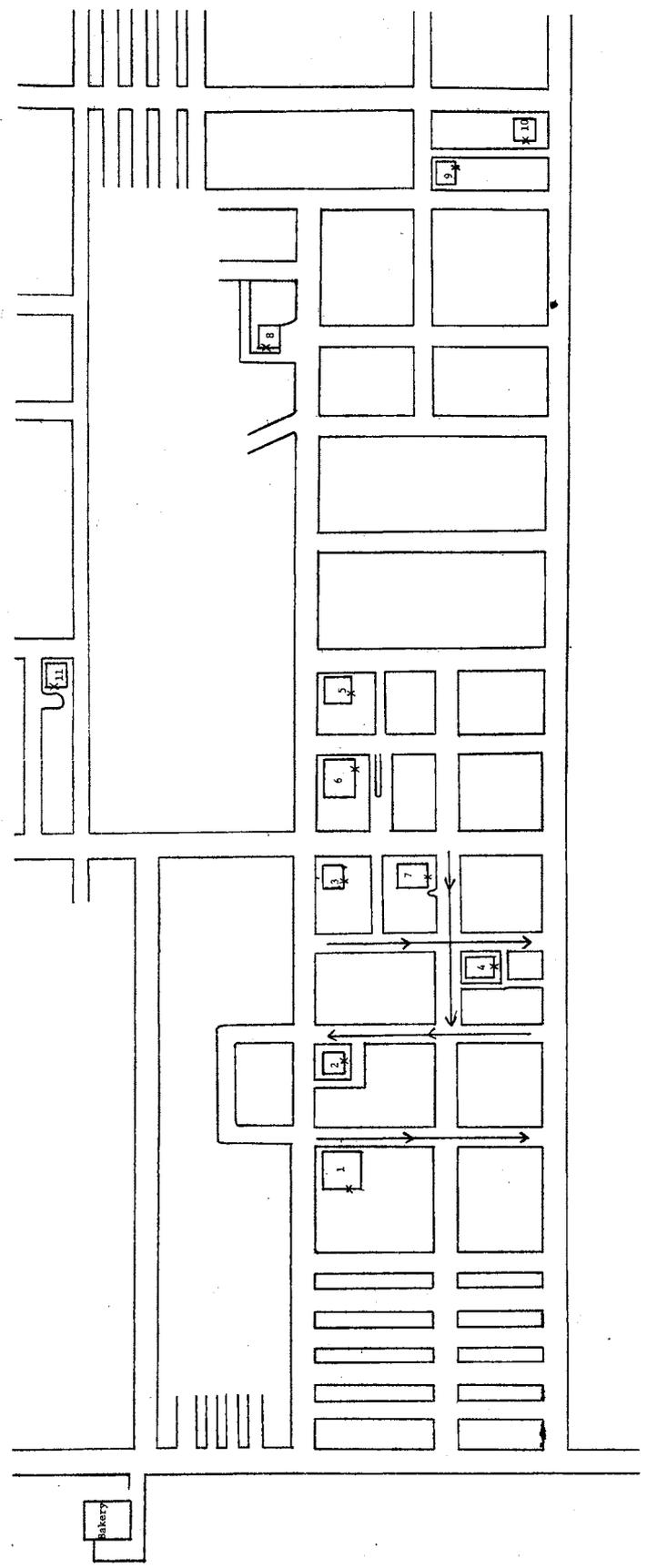
*Pie crusts are offered each day.
Fruit pies may be purchased frozen, unbaked - please specify.

APPENDIX F

ROUTE MAP FOR THOSE GLU AND FIRE STATION

SELECTED FOR THE PILOT BAKERY PROGRAM

FALL 1972



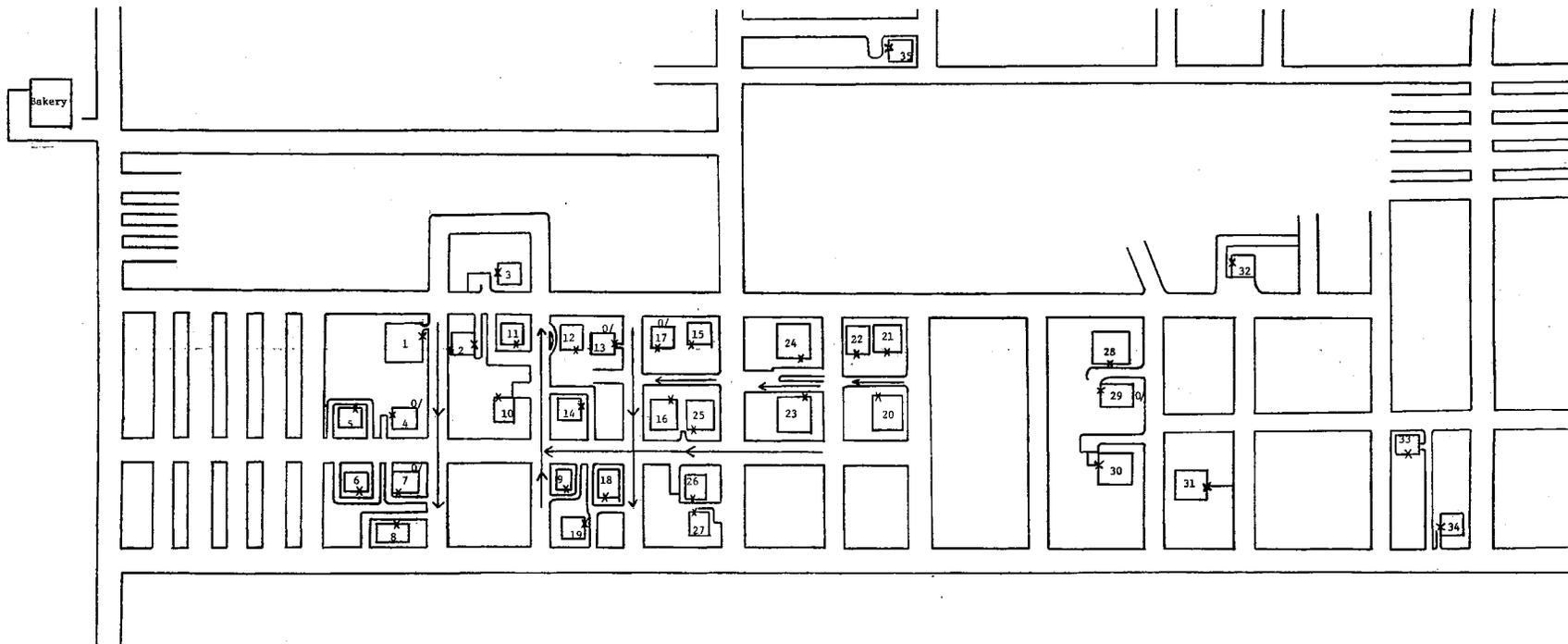
X = Delivery Door

APPENDIX G

ROUTE MAP FOR ALL FRATERNITIES, SORORITIES,

AND FIRE STATION

FALL 1972



X = Delivery Door.
 O/ = Did not participate 1971-72.

APPENDIX H

GLU NAMES AND ADDRESSES

FALL 1972

ILLINOIS STATE UNIVERSITY

Normal, Ill.

1972

GLU DELIVERY ROUTE FOR PILOT BAKERY PROGRAM

1. Kappa Sigma - 1401 West University
2. Alpha Delta Pi - 1309 West University
3. Sigma Chi - 1101 West University
4. Phi Kappa Tau - 1203 West Third
5. Sigma Nu - 913 West University
6. Zeta Tau Alpha - 1101 West University
7. Phi Delta Theta - 224 South Monroe
8. Fire Station - 600 West University
9. Phi Kappa Theta - 421 West Third
10. Phi Kappa Psi - 324 South Duck
11. Farmhouse - 424 North Washington

GLU DELIVERY ROUTE

1. Kappa Sigma - 1401 West University
2. Kappa Alpha Theta - 1323 West University
3. Delta Tau Delta - 1306 West University
4. Kappa Delta - 220 South Cleveland
5. Delta Delta Delta - 1506 West Third
6. Alpha Xi Delta - 1415 West Third
7. Gamma Phi Beta - 1405 West Third
8. Phi Beta Phi - 324 South Cleveland
9. Triangle - 1225 West Third
10. Sigma Phi Epsilon - 1308 West Third
11. Alpha Delta Pi - 1309 West University
12. Acacia - 1215 West University
13. Beta Theta Pi - 1207 West University
14. Alpha Chi Omega - 223 South Garfield
15. Sigma Chi - 1101 West University
16. Pi Kappa Alpha - 221 South Lincoln
17. Phi Gamma Delta - 1123 West University
18. Phi Kappa Tau - 1203 West Third
19. Jaooa Jaooa Gamma - 1212 West Fourth
20. Alpha Gamma Rho - 224 South Washington
21. Sigma Nu - 913 West University
22. Lambda Chi Alpha - 923 West University
23. Delta Zeta - 222 South Jefferson
24. Zeta Tau Alpha - 1001 West University
25. Phi Delta Theta - 224 South Monroe

GLU DELIVERY ROUTE, Continued

26. Chi Omega - 310 South Monroe
27. Sigma Phi Epsilon - 324 South Monroe
28. Delta Chi - 703 West University
29. Alpha Tau Omega - 240 South Hester
30. Kappa Alpha - 308 South Hester
31. Delta Upsilon - 311 South Hester
32. Fire Station - 600 West University
33. Phi Kappa Theta - 421 West Third
34. Phi Kappa Psi - 324 South Duck
35. Farmhouse - 424 North Washington

APPENDIX I

LETTER INTRODUCING THE BAKERY

PILOT PROGRAM TO THE GLU

FALL 1972

August 2, 1972

Dear Hostesses, Cooks, or Kitchen Stewards:

Something new this Fall! The Oklahoma State University Central Bakery will be selling its products to a limited number of fraternities and sororities; and your House has been selected to participate, if you desire. This is a pilot program with the participating fraternities and sororities selected by the volume of sales that they generated from the Food Service Center during the past school year.

Listed below are the bakery ordering procedures. Please read them carefully.

OSU CENTRAL BAKERY ORDERING PROCEDURES
FOR THE GREEK LIVING UNITS (GLU)

CYCLE MENU

1. A five-week bakery cycle menu will be sent to the fraternity or sorority by the Bakery delivery person. There will be a new cycle every five weeks. The cycle will list the week, day, and date that the items can be purchased from the bakery, the unit in which it can be purchased (dozen, each), and the portion size or cut. THIS CYCLE MUST BE FOLLOWED.

ORDERING

2. One week's order will be phoned* to the Bakery between 9 a.m. and 11 a.m. a week before the delivery date. For example: Order for the week of August 28 (Monday) - September 3 (Sunday) must be in to the Bakery between 9 a.m. and 11 a.m., August 21. Orders must be placed a week in advance because of production schedules.

CANCELLATION: May be made between 9 a.m. and 11 a.m. two days in advance of the delivery date. For example: A cancellation must be called in between 9 a.m. and 11 a.m. Monday in order for an item to be cancelled on Wednesday, etc.

ADDITIONS: Must be called in to the Bakery two days in advance of delivery.

SPECIAL ORDERS: Must be called in to the Bakery one week in advance of delivery.

August, 1972
Page 2
Greek Living Units

DELIVERY

3. There will be a daily delivery Monday through Saturday. Sunday's order will be delivered on Saturday. A delivery time will be established with each GLU that is participating in the pilot program. A delivery route will be followed and it is from this route that a delivery time will be designated. Hopefully, all deliveries will be made by 7 a.m. Someone must be in the House who can sign for the products.** If no one is there to sign for the products, they will be returned to the Bakery. These products will have to be picked up by 10 a.m. that same morning. Regardless if the order is picked up or not, the HOUSE will be charged!

ORDER SHEET: The order that needs to be signed lists the bakery product ordered, the amount ordered, and the price. There will be three copies. One copy will be left at the House and should be retained to check monthly billings. The other two will be returned to the Bakery. The Bakery will keep one on file and the other will be sent to the Accounting Office. The House will be billed on their monthly food service statement.

COMMUNICATION

4. Since this is a pilot program, changes may need to be made regarding the above procedures, so you will be contacted. If there are additional questions, please call.

Thank you,

Caren Messina

Caren Messina, R.D.
Central Bakery Manager

CM: pff

*372-6211, Ext. 6196 or 6197-- Caren Messina or Wendell Ely will take the order.

**All products should be counted. Once there is a signature on the order, the Bakery is no longer responsible for the products.

APPENDIX J

GLU PRICE LIST FOR BAKERY PRODUCTS

FALL 1972

OSU BAKERY PRICE LIST FOR FRATERNITIES
AND SORORITIES

CAKES

Chocolate Cakes with icing:

Chocolate Banana	9" round	\$1.35
Chocolate Cake	9" round	1.35
Chocolate Marble	9" round	1.35
Dutch Chocolate	9" round	2.00
Dutch Chocolate Fudge	9" round	2.00
German Chocolate	9" round	2.00
Red Earth	9" round	1.55
Chocolate Boston*	9" round	.95

Yellow Cakes with icing:

Yellow Cake	9" round	1.30
Applesauce	9" round	1.30
French Ribbon**	9" round	1.30
Lemon	9" round	1.35
Orange Cake	9" round	1.35
Peanut Butter	9" round	1.35
Banana Nut	9" round	1.60
Boston Cherry***	9" round	1.05
Golden Honey Comb****	9" round	1.05
Carrot Cake	9" round	1.90
Oatmeal	9" round	1.55
Butter Rum Pound Cake	tube pan	1.49
Pound Cake/icing	tube pan	1.49
Pecan Pound Cake/butter rum glaze	tube pan	1.55

White Cake with icing:

Angel Food	tube pan	1.08
Cherry Cake	9" round	1.28
Lemon Filled White*****	9" round	1.28
Spice Cake	9" round	1.28
Strawberry Cake	9" round	1.28

*Chocolate Boston: single chocolate layer filled with chocolate pudding and sprinkled with powdered sugar.

**French Ribbon: one chocolate and one yellow layer split in half. The two chocolate layers and one yellow layer are filled with vanilla pudding and the cake is iced with chocolate icing.

***Boston Cherry: single yellow layer cake split in half and filled with vanilla pudding, topped with cherries and icing piped around the cherries

****Golden Honey Comb: single yellow layer cake split in half and filled with vanilla pudding and topped with a pecan and honey topping.

*****Lemon Filled White: two white layers with lemon filling between the layers and on top of the cake and sides iced with white icing.

PIES

Fruit Pies:

Apple	10"	1.15
Blushing Apple	10"	1.15
Apple Crumb	10"	1.15
Apple Raisin	10"	1.15
Apricot	10"	1.15
Cherry	10"	1.15
Peach	10"	1.15
Single Crust Peach	10"	1.15
Pineapple	10"	1.15
Pinecot	10"	1.15
Sour Cream Apple	10"	1.35
Blackberry	10"	1.35
Blueberry	10"	1.35
Boysenberry	10"	1.35
Mince Meat	10"	1.35
Strawberry Rhubarb	10"	1.35

Cream Pies:

Chess	10"	.95
Royal Coconut	10"	.95
Lemon Cream	10"	.95
Lemon Crunch	10"	.95
Pumpkin	10"	.95
German Chocolate Pie	10"	1.60
Pecan Pie	10"	1.60

Bavarian Pies:

Blueberry	10"	1.25
Chocolate	10"	1.25
Lemon	10"	1.25
Peach	10"	1.25
Pineapple	10"	1.25

Chiffon Pies:

Chocolate	10"	1.15
Lime	10"	1.15
Raspberry	10"	1.15

COOKIES

Cinnamon Nut	dozen	.45/doz.
Chocolate Chip	dozen	.45/doz.
Peanut Butter	dozen	.45/doz.
Oatmeal	dozen	.45/doz.
Macaroons	dozen	.50/doz.
Peanut Icebox	dozen	.50/doz.
Ranger	dozen	.50/doz.
Cream Puffs*	dozen	2.00/doz.
Eclairs	dozen	2.00/doz.

*Cream puffs and eclairs are filled with vanilla pudding and sprinkled with powdered sugar.

MUFFINS

Plain	dozen	.55/doz.
Apple	dozen	.60/doz.
Pineapple	dozen	.60/doz.
Peach	dozen	.60/doz.
Raisin	dozen	.60/doz.
Cinnamon	dozen	.60/doz.
Jelly	dozen	.60/doz.
Blueberry	dozen	.60/doz.
Cheese	dozen	.60/doz.
Corn	dozen	.60/doz.
Bacon	dozen	.60/doz.
Pecan	dozen	.70/doz.
Apple Nut	dozen	.70/doz.
Banana Nut	dozen	.70/doz.
Raisin Nut	dozen	.70/doz.

BREAD

Pan Rolls - Plain	dozen	.45/doz.
Poppy Seed	dozen	.45/doz.
Sesame Seed	dozen	.45/doz.
Whole Wheat Rolls	dozen	.45/doz.
Cloverleaf Rolls	dozen	.50/doz.
French Bread	loaf	.45/loaf
Old Fashion Home Type Bread	loaf	.45/loaf
Hamburger Buns	dozen	.75/doz.
Small Submarine Buns	dozen	.75/doz.
Large Submarine Buns	dozen	1.15/doz.
Banana Nut Bread	loaf	.85/loaf
Raisin Nut Bread	loaf	.90/loaf
Dilly Bread	loaf	.75/loaf
		5.20/case
Sour Dough Hard Rolls	case	(10 doz/cs)
		5.75/case
Buttermilk Biscuits	case	(20 doz/cs)
		3.40/case
Little Loaf	case	(64 each/cs)
		2.90/case
Parker House Dinner Rolls	case	(9 doz/cs)
Pizza Crust	sheet	.60

BREAKFAST ROLLS

Cake Donuts - All Varieties	dozen	.70/doz.
Raised Donuts - Plain	dozen	.70/doz.
Jelly Filled	dozen	.70/doz.
Chocolate Bar	dozen	.70/doz.
Maple Bar	dozen	.70/doz.
Twists	dozen	.70/doz.
Fried Cinnamon Rolls	dozen	.70/doz.

BREAKFAST ROLLS, Continued

<u>Sweet Rolls - All Varieties</u>	<u>dozen</u>	<u>.80/doz.</u>
<u>Baked Cinnamon Rolls</u>	<u>dozen</u>	<u>.80/doz.</u>
<u>Danish - All Varieties</u>	<u>dozen</u>	<u>1.20/doz.</u>

APPENDIX K

GLU BILLING INVOICE

FALL 1972

OSU CENTRAL BAKERY

INVOICE № 00582

ITEM	AMOUNT ORDERED	UNIT PRICE	TOTAL PRICE
Breakfast Roll:			
Cake:			
Pie:			
Dinner Roll:			
Miscellaneous:			
Speciality:			

SIGNATURE _____

NAME OF GLU _____

ADDRESS _____

DAY _____ DATE _____

TIME OF DELIVERY _____

APPENDIX L

OSU RESIDENCE HALLS BAKERY PRODUCT LIST

FALL 1972

Dear Manager,

The following is a list of the items that can be purchased from the bakery, the unit of purchase and portion size. This list will be modified as new items are incorporated into the menu.

ITEMS	UNIT OF PURCHASE	PORTION SIZE
A. CAKES		
1. All plain chocolate cakes, sheet pan double chocolate fudge and chocolate butter mallow		9x6
2. Oatmeal, champagne, carrot cake	315 pan	6x4
3. Pound, butter rum, angel food	angel food pan	12 cut
4. Red earth	bar	16 cut
5. All other cakes	round	16 cut
B. PIES		
1. All fruit pies	10"	8 cut
2. Pineapple, chocolate, lemon*, peach, blueberry, Bavarian cream	10"	10 cut
3. Lemon cream, pineapple chiffon**, pumpkin	10"	8 cut
4. Lemon crunch, chess, coconut, pecan	10"	8 cut
5. Frozen chocolate and lime** chiffon pie	10"	8 cut
6. Refrigerated raspberry chiffon pie**	10"	8 cut
*Top the entire pie with whipped topping in the unit.		
**Top with one row of whipped topping rosettes placed near the outer crust.		
C. MISCELLANEOUS ITEMS		
1. Cookies	dozen	2 each
2. Turnovers, cream puffs, eclairs, apple dumplings	dozen	1 each
3. Cobblers, crisps, ginger- bread, hunters hot fudge pudding, cheese cake, apple betty	315 pan	6x4
4. Brownies (chocolate, butterscotch, macaroon), orange bars, peanut goldfingers	sheet pan	cut 9x12, 2 each or 6x9, 1 each

C. MISCELLANEOUS ITEMS, Continued

5. Apple souffle, straw- berry cobbler cake, peanut goldfingers	sheet pan	6x9, 1 each
6. Jelly roll	roll	16 cut
7. Chocolate and cherry boston cake	round	8 cut

D. BREADS

1. Pan rolls - plain, sesame seed, poppy seed, whole wheat	sheet pan	70 rolls/pan
2. Corn bread	sheet pan (315)	6x9 (6x4)
3. Muffins, submarine bun	dozen	1 each
4. Cloverleaf rolls	dozen	2 each
5. French, dilly, old fashion type bread	loaf (unsliced)	1/2" cut
6. Specialty breads		
a. Demi loaf - frozen mini loaf (heat and eat)	case - 64/case	1 each
b. Buttermilk biscuits* - frozen (heat and eat)	case - 20 dozen/case 240/case	2 each
c. Sour dough hard rolls - frozen (heat and eat)	case - 10 dozen/case 120/case	1 each
d. Twists, knots	dozen	1 each
e. 4" hamburger buns with onions, topping for French dip	dozen	1 each

E. BREAKFAST ROLLS

1. Donuts - raised and cake	dozen	1 each
Bars	dozen	1 each
Twists	dozen	1 each
Sweet rolls - fruit and cinnamon	dozen	1 each
Danish	dozen	1 each
2. Coffee cake	sheet pan (315)	9x6 (6x4)
3. Breakfast breads - raisin nut and banana nut		

*All biscuits other than buttermilk biscuits that are on the menu are Pillsbury biscuits.

The following is a list of the items that must be made in the units.

PIES

1.	Coconut cream pie	10"	8 cut
2.	Butterscotch cream pie	10"	8 cut
3.	Chocolate cream pie	10"	8 cut
4.	Banana cream pie	10"	8 cut
5.	Strawberry whip and chill pie	10"	8 cut
6.	Neapolitan whip and chill pie	10"	8 cut

The following is a list of breads that can be purchased from Wonder Bread.

1. Sliced white bread
2. Sliced whole wheat bread
3. Sliced rye bread
4. Longhorn bread
5. Butter gem brown and serve rolls
6. Poppy seed brown and serve rolls
7. Cinnamon raisin bread
8. Sesame seed buns
9. Hamburger buns
10. Hot dog buns

APPENDIX M

OSU RESIDENCE HALLS BAKERY CYCLE MENU III

LATE FALL 1972

OSU RESIDENCE HALLS BAKERY CYCLE MENU III

WEEK #1

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts	Raised Donuts	Raised Donuts	Raised Donuts	Raised Donuts	Cinnamon Coffee Cake	Apple Danish
Jelly Filled Donuts	Chocolate Cake Donuts	Twists	Maple Bars	Chocolate Bars	Plain Sugared Cake	Blueberry Muffins
Apple Sweet Rolls	Lemon Sweet Rolls	Baked Cinnamon Rolls	Pineapple Sweet Rolls	Raspberry Sweet Rolls	Donuts	
LUNCH DESSERTS:						
Sheet Chocolate Cake/ Chocolate Icing	Round White Cake/ White Icing/ Coconut	315 Mocha Apple Cake/Mocha Icing	Sheet Dutch Chocolate Cake/White Icing	Round Cherry Cake/ Cherry Icing	Bar Red Earth Cake/ Chocolate Icing	Tube Pecan Pound Cake/ Rum Glaze
Apple Pie		Frozen Lime Chiffon Pie	Pumpkin Pie	Peach Pie	Cherry Pie	Apple Tarts
Hunter's Pudding/ Vanilla Sauce	Ranger Cookies	Butterscotch Brownies	Apple Cobbler	Chocolate Chip Cookies	Blackberry Cobbler	Chocolate Boston Cake
Ice Cream	Cherry Crisp	Ice Cream	Ice Cream	Ice Cream	Ice Cream	Ice Cream
Fruit	Ice Cream	Fruit	Fruit	Fruit	Fruit	Fruit
	Fruit	Custard				
LUNCH BREAD:						
White Bread	White Bread	Biscuits/Jelly	White Bread	Pineapple Muffins	Pan Rolls	Buttermilk Biscuits/ Jelly
Whole Wheat Bread	Whole Wheat Bread	White Bread	Whole Wheat Bread	White Bread	White Bread	White Bread
Rye Bread	Rye Bread	Whole Wheat Bread	Pan Rolls/Jelly	Whole Wheat Bread	Rye Bread	Whole Wheat Bread
DINNER DESSERTS:						
Chocolate Cake/ Chocolate Icing	White Cake/White Icing/Coconut	Mocha Apple Cake/ Mocha Icing	Dutch Chocolate Cake/ White Icing	Cherry Cake/Cherry Icing	Red Earth Cake/ Chocolate Icing	
Strawberry Whip and Chill Pie	Pineapple Pie	Blackberry Pie	Cherry Pie	Coconut Cream Pie	Dutch Apple Pie	
Peach Cobbler	Chocolate Bavarian Pie	Fiesta Fruit Pudding	Gingerbread/Lemon Sauce	Bohemian Nut Bars/ Thin Powdered Sugar Icing	Raspberry Jelly Roll	
Ice Cream	Bread Pudding/ Vanilla Sauce	Ice Cream	Ice Cream	Ice Cream	Ice Cream	
Fruit	Ice Cream	Fruit	Fruit	Fruit	Fruit	
	Fruit	Chocolate Cool and Creamy				
DINNER BREAD:						
Pan Rolls	Sesame Seed Pan Rolls	Whole Wheat Pan Rolls	Demi Loaf	Pan Rolls	4" Onion Hamburger Buns	
White Bread	White Bread	White Bread	White Bread	White Bread		
Whole Wheat Bread	Rye Bread	Rye Bread	Whole Wheat Bread	Rye Bread		

OSU RESIDENCE HALLS BAKERY CYCLE MENU III

WEEK #2

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Maple Bars Apple Sweet Rolls	Raised Donuts Cinnamon Coffee Cake Pineapple Sweet Rolls	Raised Donuts Fried Cinnamon Rolls Lemon Sweet Rolls	Raised Donuts Twists Raspberry Sweet Rolls	Raised Donuts Chocolate Bars Baked Cinnamon Rolls	Banana Nut Bread Pineapple Danish	Cinnamon Sugared Cake Donuts Apple Coffee Cake
LUNCH DESSERTS:						
315 Pineapple Cake/ Pineapple Icing Cherry Pie Peanut Butter Crunchies Ice Cream Fruit	Round Chocolate Banana Cake/ Banana Icing/Cake Crumb Garnish Pumpkin Pie Rice Krispie Bar Ice Cream Fruit	Sheet Chocolate Cake/ White Icing/ Chocolate Drippings Pinecot Pie Cherry Boston Cake Ice Cream Fruit	Tube Angel Food Cake/ White Icing on Sides/Raspberry on Top Royal Coconut Pie Apple Cobbler Chocolate Cool and Creamy Ice Cream Fruit	Sheet Double Chocolate Fudge Cake/Chocolate Icing Cherry Crisp Ranger Cookies Ice Cream Fruit	Round Lemon Filled White Cake/White Icing Dutch Apple Pie Chocolate Cool and Creamy Pudding Ice Cream Fruit	Round German Chocolate Cake Cherry Pie Butterscotch Spice Roll Ice Cream Fruit Bread Pudding/Vanilla Sauce
LUNCH BREAD:						
White Bread Rye Bread Cornbread	White Bread Whole Wheat Bread Rye Bread	White Bread Whole Wheat Bread Rye Bread	White Bread Rye Bread Long Horn Bread	White Bread Rye Bread Pan Rolls	White Bread Whole Wheat Bread Pan Rolls	White Bread Whole Wheat Bread Brown and Serve Butter Gem Rolls Wonder Bread/Honey
DINNER DESSERTS:						
Pineapple Cake/ Pineapple Icing Apple Crisp Butterscotch Cream Pie Ice Cream Fruit	Chocolate Banana Cake/Banana Icing Peach Pie Strawberry Whip and Chill Pie Ice Cream Fruit	Chocolate Cake/White Icing/Chocolate Drippings Banana Cream Pie Coconut Macaroons Ice Cream Fruit	Angel Food Cake/White Icing on Sides/ Raspberry on Top Cherry Pie Hot Fudge Pudding/ Whipped Topping Ice Cream Fruit	Double Chocolate Fudge Cake/ Chocolate Icing Pineapple Bavarian Pie Blackberry Pie Ice Cream Fruit	Lemon Filled White Cake/White Icing Chess Pie Peach Turnovers Ice Cream Fruit	
DINNER BREAD:						
White Bread Rye Bread Pan Rolls	White Bread Rye Bread Poppy Seed Pan Rolls	White Bread Rye Bread Whole Wheat Rolls- Bakery	White Bread Whole Wheat Bread Pan Rolls	White Bread Whole Wheat Bread Dilly Bread	White Bread Small Submarine Bun-Bakery	

OSU RESIDENCE HALLS BAKERY CYCLE MENU III

WEEK #3

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Jelly Filled Donuts Lemon Sweet Rolls	Raised Donuts Chocolate Cake Donuts Cherry Sweet Rolls	Raised Donuts Twists Baked Cinnamon Rolls	Raised Donuts Maple Bars Raspberry Sweet Rolls	Raised Donuts Pineapple Sweet Rolls Fried Cinnamon Rolls	Baked Cinnamon Rolls Cherry Danish	Raisin Nut Bread Cinnamon Coffee Cake
LUNCH DESSERTS:						
Round Orange Cake/ Orange Icing Blushing Apple Pie Oatmeal Cookies Ice Cream Fruit	Sheet Dutch Chocolate Cake/Chocolate Icing Banana Icebox Pie Peanut Cake Squares Ice Cream Fruit	Round Golden Honey Comb Cake Strawberry Rhubarb Pie Macaroon Brownies Ice Cream Fruit	Round Chocolate Marble Cake/ White Icing/Cake Crumb Garnish Pineapple Pie Custard-made in unit Ice Cream Fruit	315 Carrot Cake Chess Pie Blackberry Cobbler Ice Cream Fruit	Sheet Peanut Butter Devil's Food Cake/ Chocolate Icing Pumpkin Pie Cherry Cobbler Ice Cream Fruit	Round French Ribbon Cake German Chocolate Pie Butterscotch Brownies Ice Cream Fruit
LUNCH BREAD:						
White Bread Whole Wheat Bread Pan Rolls/Jelly	White Bread Whole Wheat Bread Long Horn Bread	White Bread Whole Wheat Bread Rye Bread Cornbread	White Bread Whole Wheat Bread Rye Bread	White Bread Whole Wheat Bread Pan Rolls	White Bread Whole Wheat Bread Buttermilk Biscuits/ Honey and Jelly	White Bread Whole Wheat Bread Sour Dough Hard Rolls- Bakery
DINNER DESSERTS:						
Orange Cake/ Orange Icing Coconut Cream Pie Peach Crisp Chocolate Cool and Creamy Pudding Ice Cream Fruit	Dutch Chocolate Cake/ Chocolate Icing Single Crust Cherry Pie Hunter's Pudding/ Vanilla Sauce Ice Cream Fruit	Golden Honey Comb Cake Frozen Chocolate Chiffon Pie Apple Cheese Crisp Ice Cream Fruit	Chocolate Marble Cake/White Icing Peach Pie Peanut Butter Cookies Ice Cream Fruit	Carrot Cake Apple Pie Chocolate Bavarian Pie Ice Cream Fruit	Peanut Butter Devil's Food Cake/ Chocolate Icing Pinecot Pie Ranger Cookies Ice Cream Fruit	
DINNER BREAD:						
White Bread Rye Bread Whole Wheat Pan Rolls	White Bread Whole Wheat Bread Sesame Seed Pan Rolls	White Bread Whole Wheat Bread French Bread	White Bread Rye Bread Pan Rolls	White Bread Whole Wheat Bread Cloverleaf Rolls	White Bread Whole Wheat Bread Cornbread (for Beans)	

OSU RESIDENCE HALLS BAKERY CYCLE MENU III

WEEK #4

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Blueberry Muffins Raspberry Sweet Rolls	Raised Donuts Chocolate Bars Lemon Sweet Rolls	Raised Donuts Twists Baked Cinnamon Rolls	Raised Donuts Cinnamon Sugared Cake Donuts Cherry Sweet Rolls	Raised Donuts Jelly Filled Donuts Apple Sweet Rolls	Raspberry Danish Cinnamon Sugared Cake Donuts	Blueberry Muffins Baked Cinnamon Rolls
LUNCH DESSERTS:						
Sheet Chocolate Cake/ Toffee Icing Peach Pie Mountain Spice Drops/ Powdered Sugar Ice Cream Fruit	Tube Butter Rum Cake/ Rum Glaze Apple Pie Chocolate Cool and Creamy Pudding Ice Cream Fruit	Sheet Chocolate Fudge Cake/Chocolate Icing Cherry Pie Peanut Icebox Cookies Ice Cream Fruit	315 Oatmeal Cake Blackberry Pie Apple Dumplings Ice Cream Fruit	Sheet Peanut Butter Devil's Food Cake/ Chocolate Icing Pumpkin Pie Coconut Macaroons Ice Cream Fruit Bread Pudding/ Vanilla Sauce	Sheet Chocolate Butter Mallow Cake Frozen Lime Chiffon Pie Cherry Pie Ice Cream Fruit	Tube Angel Food Cake/ Cherry Icing Pecan Pie Apple Brown Betty Ice Cream Fruit
LUNCH BREAD:						
White Bread Rye Bread Long Horn Bread	White Bread Rye Bread Whole Wheat Pan Rolls/Honey-Bakery	White Bread Rye Bread French Bread	White Bread Whole Wheat Bread Rye Bread	White Bread Long Horn Bread Rye Bread	Sour Dough Hard Rolls-Bakery White Bread Whole Wheat Bread	White Bread Whole Wheat Bread Buttermilk Biscuits/ Honey
DINNER DESSERTS:						
Chocolate Cake/ Toffee Icing Chocolate Chip Bavarian Pie Cherry Crisp Ice Cream Fruit	Butter Rum Cake/Rum Glaze Vanilla/Chocolate/ Strawberry Layered Whip and Chill Pie Cheese Cake/Cherry Sauce Ice Cream Fruit	Chocolate Fudge Cake/ Chocolate Icing Coconut Cream Pie Applesauce Ginger Bars Ice Cream Fruit Custard	Oatmeal Cake Banana Cream Pie Peach Cobbler Ice Cream Fruit	Sheet Peanut Butter Devil's Food Cake/ Chocolate Icing Apple Raisin Pie Pineapple Bavarian Pie Ice Cream Fruit	Chocolate Butter Mallow Cake Pinecot Pie Strawberry Whip and Chill Pie Ice Cream Fruit	
DINNER BREAD:						
White Bread Whole Wheat Bread Sesame Seed Pan Rolls	White Bread Pan Rolls Rye Bread	White Bread Whole Wheat Bread Pan Rolls	White Bread Rye Bread Buttermilk Biscuits/ Honey	White Bread Whole Wheat Bread Pan Rolls	Pizza Crust Rye Bread	

OSU RESIDENCE HALLS BAKERY CYCLE MENU III

WEEK #5

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST ROLLS:						
Raised Donuts Chocolate Bars Baked Cinnamon Rolls	Raised Donuts Jelly Filled Donuts Pineapple Sweet Rolls	Raised Donuts Fried Cinnamon Rolls Cherry Sweet Rolls	Raised Donuts Twists Lemon Sweet Rolls	Raised Donuts Plain Sugared Cake Donuts Apple Sweet Rolls	Cherry Danish Baked Cinnamon Rolls	Pineapple Coffee Cake Banana Nut Bread
LUNCH DESSERTS:						
Round Spice Cake/ Caramel Icing Lemon Bavarian Pudding* Apple Cobbler Ice Cream Fruit	Bar Red Earth Cake/ Chocolate Icing Sour Cream Apple Pie Cup Custard Ice Cream Fruit	315 Cherry Champagne Cake Peach Pie Chocolate Brownies Ice Cream Fruit	Sheet Chocolate Cake/ Caramel Icing Pumpkin Pie Cherry Crisp Ice Cream Fruit	Round Banana Cake/ Banana Icing Apricot Pie Gingerbread/Lemon Sauce Ice Cream Fruit	Round Chocolate Marble Cake/ Chocolate Icing Cherry Pie Chocolate Cool and Creamy Pudding Ice Cream Fruit	Round Lemon Filled White Cake/White Icing Apple Turnovers Raspberry Sponge Roll Ice Cream Fruit
LUNCH BREAD:						
White Bread Whole Wheat Bread Rye Bread	White Bread Whole Wheat Bread Pan Rolls/Jelly	French Bread White Bread Whole Wheat Bread	Tart Shells White Bread Whole Wheat Bread Rye Bread	White Bread Rye Bread Whole Wheat Bread 4" Onion Hard Roll- Bakery	White Bread Whole Wheat Bread Pan Rolls	Poppy Seed Brown and Serve Rolls-Wonder Bread White Bread Whole Wheat Bread
DINNER DESSERTS:						
Spice Cake/Caramel Icing Cherry Pie Hot Fudge Pudding Ice Cream Fruit	Red Earth Cake/ Chocolate Icing Blackberry Pie Chocolate Chip Cookies Ice Cream Fruit	Cherry Champagne Cake Coconut Cream Pie Chocolate Boston Cake Ice Cream Fruit	Chocolate Cake/ Caramel Icing Yellow Cupcakes/ Assorted Icings Peach Cobbler Ice Cream Fruit	Banana Cake/Banana Icing Chocolate Bavarian Pie Rice Krispie Bar Ice Cream Fruit	Chocolate Marble Cake/Chocolate Icing Royal Coconut Pie Cheese Cake/Pineapple Sauce Ice Cream Fruit	
DINNER BREAD:						
White Bread Whole Wheat Bread Pan Rolls	White Bread Rye Bread Cloverleaf Rolls	Pan Rolls White Bread Whole Wheat Bread	White Bread Whole Wheat Bread Pan Rolls	White Bread Rye Bread Whole Wheat Pan Rolls	White Bread Rye Bread Buttermilk Biscuits/ Jelly	

*Order the Lemon Bavarian Pudding by the gallon - toasted cake crumbs/whipped topping.

VITA

Caren Messina

Candidate for the Degree of

Master of Science

Thesis: MODIFICATION AND EXPANSION OF CENTRAL BAKERY SERVICES TO RESIDENCE HALLS AND GREEK LIVING UNITS AT OKLAHOMA STATE UNIVERSITY

Major Field: Food, Nutrition and Institution Administration

Biographical:

Personal Data: Born in Philadelphia, Pennsylvania, July 16, 1948, the daughter of Kenneth George and Marlyn Messina.

Education: Attended Hammonton Junior Senior High School, Hammonton, New Jersey; graduated in 1966; received the Bachelor of Science degree with a major in Dietetics from Notre Dame College of Ohio in May, 1970; completed the requirements for the Dietetic Internship at Oklahoma State University, Stillwater, Oklahoma, in July, 1971; completed the requirements for the Master of Science degree in July, 1973.

Professional Experience: Employed as a student dietitian by Ancora State Hospital for four summers, 1966-1970, and Manager, Central Bakery by Residence Halls Food Service, Oklahoma State University, 1971-1973.

Professional Organizations: Registered member of the American Dietetic Association, Oklahoma Dietetic Association and Omicron Nu Honor Society.