

The Interpretation of
Late Nineteenth Century Faunal Remains
Through the Analysis of Written Texts

A Dissertation

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ABSTRACT

One of the objectives of archaeological study is to understand the relationship between material remains and culture. This study examines historic documents relating to foods to better understand the relationship of archaeological faunal materials to social status.

The concept of diacritical feasting and other anthropological works on food provide ways of identifying patterns of food use that relate to status. The documents examined here, including menus, price lists, newspapers, and other food related documents, provide emic views of food that provide a link to the late 19th century, the period of this study.

Patterns of food use, identified in a calendrical analysis of late 19th century menus, provide a basic pattern of differential status among meat types. Certain types of meat appear in socially significant meals (feasts) on a patterned basis. Others are absent during these feasts. Examination of relevant documents, especially some dietary studies, reinforces the social scaling identified in the menu analysis.

This scaling is then applied to faunal material from archaeological sites. This test confirms that the patterns can be used in archaeological work and that analysis done using criteria established here provides a more consistent picture of status than prior methods when examined along with other artifact types. Through this study, specific criteria are identified that should be considered

when attempting to establish social status through faunal remains within the specified spatial and temporal contexts.

This dissertation by Edward C. Otter fulfills the dissertation requirement for the doctoral degree in Anthropology approved by Dr. William M. Gardner, Ph.D., as Director, and Anita G. Cook, Ph.D., and David T. Clark, Ph.D. as readers.

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CHAPTER 1: INTRODUCTION

The purpose of this study is to investigate variations in meat consumption patterns among people of various social classes in New York City during the late 19th century. Once identified, these patterns can be used by faunal analysts to assist in their interpretations of the social conditions of site occupants.

To achieve this purpose the relationship between meat types and meat cuts and social status is examined. Because of the inappropriate level of fit between status estimates based on meat cuts, as currently analyzed, when viewed in conjunction with documents and other artifact types the theoretical basis of such analysis must be flawed. While the concept of a relationship between cuts and social status is believed to be valid, the nature of the relationship has not been previously examined in any systematic way.

This study uses written records to understand the context of production, marketing, and use of meat during the late 19th century. The major portion of the work is an analysis of calendrically based menus where socially prominent meals such as holiday feasts are contrasted with everyday meals. Once the separate patterns of social feasts and ordinary meals have been defined a means of differentiating sites by social status based on faunal remains can be constructed.

The connection between feasts and status is through the social value of feasts during the period of study. The connection between elaborate social feasts and elevated status are well established through studies involving architectural

space (Clark 1987), serving items (Hayden 1996; Rainwater 1987), and manners (Kasson 1987; Kasson 1990; Visser 1991).

This research focuses on variability of archaeological faunal assemblages and the relationship to socio-economic status of site occupants. Rather than relying on the relative costs of meat collected from period price lists and using the estimated values of meat remains as an analogy to status, this work examines documents to understand what meats were used in situations of varying social value. Once a correlation is made between meats served at socially prominent events (as opposed to those of the ordinary meal), it will be possible to estimate the social status of site occupants through analysis of the faunal remains recovered from archaeological sites

A series of menus are analyzed. Since menus are idealized representations of how a meal should be composed, and since these meals include ordinary fare and social feasts, the implicit social values of meats (and other foods) can be identified. A basic assumption was made about status and meals: formal meals, whether for calendrical or life history events, are feasts embedded with increased social value. The meat served at these formal meals will reflect this added value. This assumption is in keeping with studies of dining and the social importance of these public meals. Holiday meals in the cookbooks are used as examples of these feasts as opposed to everyday meals served on non-holidays. This assumption establishes a basic dichotomy between formal and holiday meals on one hand and ordinary meals on the other.

Examination of the variation between these should provide a base line for determining high status and low status meats by identifying food for feasts as opposed to ordinary foods.

Regional and Temporal Focus

Because of the variability of foodways, and hence faunal assemblages, by geographic regions and temporal changes, a conscious effort was made to restrict this study in time and space. The area and period selected for this study was a late 19th urban setting. The period was chosen because of the voluminous literature from the period that could be accessed. The place selected was New York City. Other cities in the Middle Atlantic region have archaeological sites that could provide data here. However, only in New York City have sites from upper, middle, and lower class occupations of the late 19th century been studied.

New York City in the late 19th century was a confined geographic space in which a growing number of people of diverse ethnic heritage lived. These groups existed in a cultural environment dominated by the new American culture that was predominately derived from England with various European influences. Besides being identified by differing heritage, the people of the city were also separated by economic standing from the very poor to the super rich.

Food preparation was done along ethnic lines yielding ethnically recognizable meals but the procured foods were alike because everyone bought from the same limited numbers of butchers. It is reasonable to assume that while there were major ethnic groups within limited geographic space in New

York City, the cuts of meat sold and purchased were similar across the ethnic spectrum. The manner in which households and individuals adapted to the multi-cultural environment may be reflected in the foods they ate. However, if these foods were purchased in common markets, the variation would be most evident in the preparation of foods.

According to Goode, Theophano, and Curtis (1984:72) the cyclical patterning of meal formats is the most tenacious ethnic identifier in foodways. These patterns are not directly recognizable in archaeological samples. There may have been some ethnic-based selection, such as an avoidance of pork by Jews, but mostly these selections will be minor variations in the archaeological record that will be very difficult to identify and interpret. As with variation in Euro-American and Afro-American foodways on plantations, ethnic variables may be masked by economics.

However, there is ample evidence that meat purchases and preparation did vary significantly along lines of social status. The largely American upper class was introduced to French cuisine in the 19th century and embraced it wholeheartedly (Levenstien 1988:10). As will be shown, this variation was present in the types of meat purchased and consumed, something that is visible in the archaeological record.

Following this introduction, Chapter 2 of this work discusses in overview the various ways anthropologists, historians, and others have looked at food in order to place this work into the broader context of food studies. This discussion

is by necessity cursory. The volume of literature is immense and the theoretical orientations and research directions numerous. Of special note, though, is a discussion of feasting. Ideas of feasting provide an important avenue for distinguishing social status through the study of archaeological materials (Deitler and Hayden 2001).

In Chapter 3, New York City during the late 19th century is examined to provide a basis of understanding the social composition of the city. While other cities could provide sites for this study, the choice of New York was made because only in New York City had archaeological study examined sites from upper, middle, and lower class sites (Fitts 1999; Fitts and Yamin 1996; Milne and Crabtree 1996; Morin 1990).

Chapter 4 discusses the selection of texts chosen for this work. Because of the need for calendrically based menus, all recipes and menus available from the period were not included. The issues of scheduling and the need for specific menu types is further elaborated in Chapter 5 where analytical methods are discussed.

Chapter 6 provides an analysis of certain texts that allows us to understand the implicit meanings of the social values of meats. Besides being explicit ethnographic text, some of the documents used here contain menus that are interpreted like artifacts. Attributes from the menus are characterized, tabulated and quantified. The various meats are examined according to when

in the calendrical cycles they are used; whether they are used on holidays or other special occasions, that is in feasts, or during ordinary meals.

Chapter 7 brings related non-menu information to the study. Various sources including news papers, dietary studies, and other information from cookbooks, are used to develop the concepts derived from the menu analysis. These other sources also provide information about the marketing and pricing of different meats. The late 19th century was a dynamic period of technological innovation. These innovations greatly altered all aspects of American foodways. New York City, being the largest and wealthiest city in North America, had most of these new technologies first. Examination of meat prices in this chapter clearly shows that cost is not the most important factor in meat selection and that there is no direct correlation between family income and the cost of their meats. This becomes clear when meat prices are applied to the types of meats used for status meals presented in Chapter 6.

The issues developed in the preceding chapters are then applied to the interpretation of archaeologically derived faunal samples in Chapter 8. Studies of late 19th faunal assemblages are re-examined to determine whether the information gathered from the document study provides a more consistent representation of status when compared to other aspects of the larger archaeological study.

This work is concluded in Chapter 9. The results of the document analysis are summarized. Issues important for the analysis of historic period

faunal remains are highlighted. Along the way, some interpretive myths current in archaeological faunal analysis are exposed.

CHAPTER 2: FOOD STUDIES: AN OVERVIEW

Studies of food are numerous and varied. Food as a subject has been examined by psychologists, sociologists, biologists, historians, folklorists, and anthropologists. These studies are varied in purpose and methods but together form a body of research into which this study must be placed. Some of these studies have little bearing on this work. Work by psychologists and sociologists are too removed from this study to be of reference. This work includes historical study as well as anthropological theory to address an archaeological issue. Studies by anthropologists, folklorists and historians are referenced. Research by biologists, primarily nutritionists, are important because some studies conducted during the late 19th century provide data useful in this work.

Food consists of plant and animal materials (containing essential body nutrients, such as carbohydrates, vitamins, minerals, fat, and protein) taken into the body for sustenance. Yet for humans, food is not simply a biological necessity, it is culturally imbued. Charles Camp claims that while food is important, eating is more important (Camp 1989:21).

Because of food's essential nature and role of providing nutrients for the body, food has been incorporated into cultural systems in diverse ways. Regional variation can be seen in cooking techniques, combinations of food items or spices, and even serving style. Hundreds, if not thousands, of cookbooks are available on specific regional or ethnic foodways.

Foodways do not just vary across space and between ethnic groups. There are changes in any regional foodway through time based on changing attitudes of what is good or proper food (attitudes that are culturally bound) and the availability based on seasonality or economics of different foods. There may be variation in the foods consumed between contemporaneous members of the same society and culture depending on economic means and social standing. Also, individuals alter their patterns of food consumption between the everyday and the special occasion.

Historians view food in text, often to trace where a food originated, how it changed and became what we eat today (Root and de Rochemont 1976; Tannahill 1973; Conlin 1986). When Harvey Levenstein discusses how military service in World War II introduced foreign foods to the American diet (Levenstein 1993) he exemplifies this approach. Levenstein clearly states his interest was in understanding how food habits change (Levenstein 1988:viii). A number of such historical studies examine the way foods changed through time and how the types of foods available affected life and history (Conlin 1986, Root and de Rochemont 1976, Tannahill 1973).

One of the main thrusts of folklore studies is to document, that is to describe, foodways. This was the approach taken by Don Yoder (Camp 1989:14). In the 1970s the work of social anthropologists impacted folklorist studies resulting in a more social oriented approach to foodways studies (Camp

1989:15). This body of work has affinities to both historical studies and anthropology.

According to Charles Camp, American folklorists studying foodways should, “make explicit much about food that is implicit in American culture” (Camp 1989:24). With this goal, Camp is clearly indicating a belief that food is tied to culture. The term foodways is defined as “all aspects of food which are culture-based, as well as all aspects of culture which use or refer to food” (Camp 1989:24).

Since foodways are cultural, they are manifest in human groups. The informal passage of knowledge as customs within a group, defines the group. By looking at group customs of food, Camp says, the food itself becomes less important than the food acts and the important subject of study moves from objects to behavior (Camp 1989:25). In Camp’s discussion he condenses the place of food in the human world into a few brief sentences. “Food is Important. Eating is more important. Eating well is most important - desirous, nutritionally obligatory, socially mandatory” (Camp 1989:21). Eating well, not just eating, is necessary to human existence, according to this quote. To eat well, food must satisfy the body and do so within cultural bounds.

Some folklorist studies may illustrate how food serves to maintain ethnic heritage (Kalcik 1984; Sherman 1988) or how localized traditions survive (Bronner 1986; Neustadt 1988), how communities are reconstituted and maintained (Fertig 1988), or other similar topics.

Susan Kalcik's examination of changes in foodways in immigrant groups in the United States (1984) shows how food is a means of celebrating ethnic or group identity. Following on ideas of Mary Douglas, Kalcik presents food as reflecting social boundaries while helping to maintain group cohesion (Kalcik 1984:47). Various factors are identified as important to retention or abandonment of food patterns. These include the age of the immigrant, occupation, level of education of the cook, family age and structure, economics, convenience, and status (Kalcik 1984:40). Ethnic foods may be dropped when they are signs of low status in the new culture and adopted to show an upward shift in status. Accepting new foodways is a means of showing that immigrants belong in their new home (Kalcik 1984:50).

Anthropology provides the broadest examination of food. Within cultural anthropology a number of categories can be defined into which most food studies can be classified. These categories, not always completely segregated, include: Biological, economic/political, functional/adaptive, sociological, and archaeological. In that all of these approaches deal with food and human behavior they tangentially relate to this study in varying degrees.

Biological studies are those that explore the relationship between food and health, nutrition, or disease. These types of studies may be encountered in the medical literature although physical anthropologists also work in this area. Most of this research is not applicable to this study. However, some of the data used in this work are drawn from nutritional studies.

Economic/political studies portray food as a commodity that is produced, bought, sold, and otherwise exchanged. Through its economic power, food is used to political ends. Using food as a weapon, that is to coerce people to certain actions or as punishment, falls within this category.

Another type of food study can be referred to as the functional or adaptive type. Marvin Harris is the best known proponent of these types of studies. Works of this type see variations in foodways as functioning in some culturally adaptive fashion. Harris (1977) and Harris & Ross (1987) view food through frameworks of economic or biological necessities.

Arguably the largest body of anthropological work on food is referred to here as sociological. Within this group subdivisions can be made. Food is sometimes seen as a metaphor. In other instances it is seen as a marker that identifies group boundaries (ethnic, religious, or other social groups). Food can also be seen as a means of social action.

Much social anthropological work on food has looked at how food operates within ethnic or regional boundaries. Food is used to mark these boundaries as well as other social groupings. These groups can be religious (Feely-Harnik 1981), gender based (Harbottle 2000), ethnic (Kalcik 1984), or status oriented (Goodey 1982; Weissner & Schiffenhovel 1996).

Susan Kalcik's study, and others similar to it (Cussler & DeGive 1952, Goode, Theophano & Curtis 1984) show that food is a visible and important symbol of social position. Food marks one as an insider or an outsider, whether

the boundaries be ethnic, religious, or status. If people eat as they wish to be perceived (Kalcik 1984:54) then with whom they eat will have an influence on what they eat. These aspects of this type of study make them relevant to the work presented below.

In choosing a meal, the participant chooses to express themselves - a self rooted in their culture, society, and history (Mintz 1996:4). Food, or rather dining and feasting, is sometimes seen as an activity that builds social cohesiveness and reinforces cultural or ethnic identity (Goode, Curtis & Theophano 1984). Counihan, in her study of eating habits among American college students, claims food choice expresses both a sense of individuality and a sense of hierarchical social standing (Counihan 1999).

Sydney Mintz claims that the act of choosing to consume [particular foods] can provide a sense of choice and self (1996:13). While food is a biological necessity, human food eating is clearly not bound solely by the animalistic need to eat. There are cultural variations and social aspects that need to be acknowledged.

The inclusive/exclusive ideas associated with ethnic variation in diet as noted by Kalcik (1984), Cussler and De Give (1952) Goode, Curtis and Theophano (1984), and others, can be expanded. If food is used to express group identity along ethnic lines, then why not along religious lines, or status lines? Food marks social lines, and social lines are multi-variate. An individual

belongs to many social groups. Thus the context of their eating - in which group they are present - will influence the nature of their food and the rules for eating.

In *The Lords Table* by Gillian Feely-Harnick (1981) food is shown to be part of religious inclusion. Abiding by dietary rules from God was inclusion while violation of these laws marked one as an outsider (Feely-Harnick 1981:165). Again, food is used as an inclusive/exclusive signifier. The ritualization of food strengthens the symbolic meaning of the sharing (Takarev 1985:82).

Food can also mark status groups. Recent work in this area has produced insights into status maintenance and mobility (Goody 1982, Wiessner & Shiefenhovel 1996, Dietler 2001).

Where Mary Douglas states that foods encode social events (Douglas 1975:251), it is, rather, that the social event provides the context in which the meaning of the food is established. In other words, the social event in which food is eaten encodes the food with meaning. Any particular cut or type of meat can be used in various social situations. There is no inherent meaning in the meat or its style of preparation but rather the meaning is gathered from the event and the setting and manner of serving.

An example is the Thanksgiving turkey dinner. For most Americans, there is nothing that can be substituted for the roast turkey. It wouldn't be Thanksgiving without the bird. However, roast turkey can be served at other

times and for other events, such as entertaining important guests. The mere fact that roast turkey is served does not make the meal Thanksgiving.

These ideas are easy to comprehend when thinking of church dinners, fire house banquets, and the like. It is not so easy when thinking of meals eaten at home when no one other than blood relatives are present. In this situation what is food to signify, what inclusion or exclusion? Sydney Mintz refers to this as “inside meaning” (Mintz 1996:20). Inside meaning is described as “daily life conditions of consumption” by Mintz. These conditions would include access to different foods, time to eat and prepare meals, historical (ethnic) background, and other personal factors. This is the individual level of choice and constraint, the expression of self (Mintz 1996:20).

Here Mintz states that the expression is of self, whether at home or among others. That is to say that ideas of inclusion and exclusion signified by food (or in other ways) are done at the personal level. The symbols express not only to others but to the self a sense of belonging within the group, whatever the group may be. Thus even a personal meal at home, or the meals chosen by college students (Counihan 1999), would be imbued with meaning about how the individual (or family) perceives themselves within their society.

In opposition to inside meanings, Mintz has a category he calls outside meanings (Mintz 1996:20). Outside meanings are those things that are beyond the scope of individuals. These circumstances involve those changes made by transformations that transcend individuals and local communities. Changing

technology alters how food is distributed. Scarce items become more common. Expensive foods become more affordable. These are the types of changes involved with outside meaning. Outside meaning, then refers to the social, economic, environmental and other conditions in which individuals exist.

Archaeological studies of food typically consist of the analysis of archaeologically derived faunal and floral samples. A large number of archaeological food studies, particularly those within prehistoric archaeology, hope to identify hunting, foraging, and agricultural practices and in these ways examine the relationship of culture to the environment (Larson 1980; Spiess 1979). Of late, an effort has been made by some archaeologists to incorporate more social theory into the archaeological studies of food to better understand prehistoric society and culture (Bement 1999; Kelly 1997, 2001).

Because of their access to written records, historical archaeologists have, for a longer time, attempted to identify social aspects of bone assemblages (Otto 1980, 1984; Davidson 1982; Shultz and Gust 1983; Garrow 1987). However, even these studies do not neglect the basics of examining diet.

The concept of food as a social marker is important to analysts of archaeologically derived faunal remains. Since food can be used to mark various social boundaries (economic, ethnic, geographical etc), one of the tasks of the faunal analyst is to understand what the food remains being studied are relating about the economic and status position of the people that left the materials.

Recent work in this direction has centered on the concept of feasts. By examining the material culture characteristic of feasts it is possible to identify the remains of feasts in the archaeological record (Dietler 2001). Feasting is seen as a central social practice (Dietler and Hayden 2001). Feasts can be characterized in different ways but central to all definitions is that feasts include group participation of food sharing. The size and constituency of the groups may vary. There may be rituals involved.

Feasts can be categorized. Michael Dietler groups feasts into empowering, patron-role, and diacritical (Dietler 2001). Empowering feasts are competitive and political, such as the potlatch. Patron-role feasts re-affirm non-equal social status. Diacritical feasts are used to reinforce group identity among the elite (Dietler 2001:85). This type of feast contributes to the creation of upper class groups by excluding others (Hayden 1996:129). Style becomes important. This style can be in the form of the foods cooked, the setting, types of utensils, and rituals or manners (Dietler 2001).

The stylistic differences between feasting and everyday food consumption provides a means for identifying feasts in the archaeological record. If the stylistic accouterments of feasting can be materially identified then these things can be recognized by archaeologists.

One of the features that Hayden (1996:197) identified as typical of feasts is special foods. Special foods are either exotic, expensive, or difficult to prepare.

It is in this area that the current study has particular validity. As will be seen by segregating special meals (holidays and sundays) from everyday meals the special foods of feasts are identified. This information can then be applied to archaeological faunal assemblages to identify a feast pattern indicative of upper status households.

This discussion is relevant here because of the well know feasts associated with the upper class of the late 19th century and it is the late 19th century that is the focus of this research. Late 19th century feasts were meals that contained the essential elements of diacritical feasts. They were for the upper class. Meals were taken in special dining rooms or restaurants. The manner of serving style (*ala Russ*) where each course was brought separately to the table only after the previous course had been removed was stylistic as were the sets of fine dishes and utensils used. It has been recognized for some time that ceramic styles can vary between rich and poor. Diana DiZerega Wall (1991, 1994) made statements that associated fancy ceramic wares with guest dinners, although she did not place these conclusions in an explicit context of feasting. Fitts (1999) also examined the role of ceramics in social dining.

There were established guidelines for inviting guests, seating them, for the way food was to be eaten, where items were placed on the table, etc. So complicated were these rules that numerous books and chapters of books were written to provide instruction. A substantial amount of research has been

conducted on manners as well including works by Visser (1991) and Kasson (1987,1990).

Not all foods consumed in late the 19th century were part of this feasting. Regional, ethnic, and temporal boundaries exist and these need to be examined. To this end, Chapter 3 provides a social context for New York City. The status variability shown provides a backdrop for the meals and patterns discussed in later sections of this work.

CHAPTER 3: NEW YORK CITY IN THE LATE 19th CENTURY

New York City after the Civil War was a diverse and congested place. Probably because of the geographical constraints of being on an island, New York City developed a density unrivaled in the United States. Its port and transportation facilities drew commerce and immigrants in record numbers. New York developed urban characteristics sooner and to a greater degree than any other place in the country.

The city was home to poor living in wretched conditions and to an ever increasing number of millionaires. Between these two extremes were the working poor and middle class. The city was restricted to the southern tip of Manhattan in 1811, but by 1870 Brooklyn alone contained over 34 square miles of houses, stores, and factories. The Lower East Side became the most densely populated place in the world (Burns and Sanders 1999).

European immigrants poured into the city. During the 30 years after the Civil War (1865 to 1895) the size of New York City grew 15 fold (Burns and Sanders 1999:153). The ethnic make-up at the end of the Civil War was dominated by those of American birth with sizeable populations of English, German, and Irish immigrants. By the end of the century, Italians, Jews and other European groups had also developed large populations. Offspring of the earlier immigrants assimilated to varying degrees.

Death statistics can be used to estimate the ethnic make-up of the city. Bureau of Vital Statistics data reported in the New York Times listed 226,674

people living in New York city in 1860. Within that population there were 6,629 deaths; 3576 male and 3337 female. Children accounted for 4,844 deaths. By ethnicity, 5,405 of the dead were American born (81.5%), 829 were Irish (12.5%), 229 were German (3.4%), and 197 were English (2.9%)(New York Times February 1, 1861).

Assuming these figures to be representative of the population in general, the city was largely occupied by American born persons. Irish, German, and English groups were a small portion of the population. Italians and other European groups were apparently few in numbers.

Clearly, other groups were present. A report on a tenement fire at 142 Elm Street, where 30 people died, appeared in the New York Times on February 3, 1860. Among the listed occupants of the building was a Jewish family of 8 persons. A synagogue existed in the city since at least 1729 (Harpers 1899).

There were over one million people in New York City by 1880 and 1.5 million by 1890 (Schlesinger 1933:68). These figures do not include people living in Brooklyn, which contained another 800,000 in 1890. This tremendous population growth in New York City during the last half of the 19th century was largely the product of immigration.

This was a second period of immigration, the first being in the second quarter of the eighteenth century . Almost 16 million immigrants landed in New York between 1884 and 1915. Immigration increased after the depression of the 1870s. The rate of immigration also decreased during the depression of

the 1890s (Berrol 1997:84). Immigrants during this period included Irish, German, Italians, Polish, Russian, and other east Europeans. In that same year there were 19,512 blacks in New York (Berrol 1997:84).

At the end of the Civil War, immigrants were spread throughout New York City with only small ethnic neighborhoods. With the new wave of European immigration, the larger ethnic neighborhoods familiar in the 20th century began to develop. Jacob Riss' description of The Bend at end of the 19th century illustrates the closeness of ethnic groups within the city: one street being home to Jews, while around the corner Italian was the predominant language (Riss 1989[1891]:6). Segregation by race was strong in New York City (Ernst 1979:1).

In 1855 Germans accounted for about 15% of the population in New York. By 1884, 35% of New York could claim German roots. The only immigrant group larger than the Germans was the Irish (McCaffrey 1996: 217). During the first half of the 19th century Germans spread throughout the city. A German neighborhood developed in the Bowery (Ernst 1979:42).

Irish settlement in New York began in Colonial times. The rate of immigration of Irish increased in the 1840s as the potato famine devastated Ireland. Between 1847 and 1851 over 848,000 Irish landed in New York with 163,000 of these arriving in 1851 (Diner 1996:91). In 1855 Irish comprised about 30% of New York's inhabitants (Berrol 1997:60) but by 1870 this percentage was

reduced to just over 20% of the population. By 1884 about 40% of New York claimed Irish descent (McCaffrey 1996: 217).

The Irish settled throughout the city and moved frequently based on employment opportunities (Diner 1996:93). Because the Irish were largely unskilled labor, there was some gravitation towards lower Manhattan where rents were cheap and work was available (Diner 1996:9). As laborers, the Irish were employed on large government backed projects. This aligned them to the politicians in charge such as Boss Tweed who was in power between 1857 and 1870. Such connections with local politicians brought more and more Irish into politics. Jobs requiring political support, through licensing or appointment, went increasingly to Irish. By 1855 Irish comprised 27% of the police force.

English and Scotch immigrants were the third and fourth largest groups in New York during the first half of the 19th century. Their non-catholic religion and the fact that they spoke English allowed them to intermingle with the American base population to a greater degree than the Irish or Germans (Ernst 1979:43). Nearly two and a half million Jews settled in New York between 1870 and 1920 (Berrol 1997:93).

Italians began immigrating to New York in large numbers around 1870. A close-knit ethnic community referred to as Little Italy developed with segregation among the Italians based on the home regions of Italy (Berrol 1997:88). As the relative new-comers, the Italians entered at the bottom of the working pool (Riss 1989[1891]:42).

The large numbers of immigrants to New York City caused the city to grow at a rapid pace. Labor markets could not absorb the amount of new workers. This kept wages low. Housing could not expand fast enough to keep pace, either. As early as the 1830s, old houses were being divided into apartments (Ernst 1979:48; Riis 1971[1901]). The first tenement was built in 1833 (Stott 1990:169).

Perhaps the most notorious tenement areas of the early 19th century was the Five Points. Built on a filled pond, Gotham Court, a tenement building, was described in 1864 as a being 34-feet 4-inches wide and 234-feet deep, five stories tall and containing 120 tenements of two rooms each (Veiller 1903:78). This condition was reckoned to be about average for tenements in the lower part of the city (Veiller 1903: 79) although in all likelihood it was more towards the extreme of cramped.

As the population of New York grew and housing became scarce older houses were subdivided or enlarged to increase the number of people that could be accommodated. As landlords realized the profits to be had by renting poorly constructed, unventilated, and badly maintained flats, buildings were constructed as rental housing. These were built to hold as many people as possible with no apparent concern given to light or fresh air (Riis 1997 [1890]:11).

In 1890, ex-police photographer Jacob Riis published his first book “How the Other Half Lives.” This book describes in lurid detail the living conditions

in some of the poorer tenements of New York City. Among the stories and photographs of squalor are statements about the formation of the tenements, the ethnic make-up of residents and the nature of their homes (Riis 1997 [1890]). A second book, “The Battle with the Slum”, is, in Riis’ own words, a sequel to *How the Other Half Lives* (Riis 1998 [1902]). Together these books present a valuable picture of late 19th tenement life in New York City.

The first report on tenements in 1853 stated three evils: closeness of buildings, density of population, and lack of ventilation (Veiller 1903:81). It was recognized through prevalence of disease and high mortality rates that the tenements were unhealthy (Veiller 1903:81). Tenement house laws were passed in 1867, 1879, 1887, and 1895. Each of these laws sought to improve the living conditions of the buildings, providing for better ventilation, more sanitary bathrooms and plumbing, and fire precautions. In 1864, there were 15,309 tenements with nearly a half million residents in New York city. By 1900 there were 1,701,643 people living in 47,000 tenements within Manhattan and the Bronx (Riis 1998 [1902]:81). In greater New York, nearly two thirds of the four million residents lived in tenements (Riis 1998 [1902]:81). Table 1 lists the numbers of tenement buildings and occupying families in the 20 wards of Manhattan (Veiller 1903).

Ward	ward size (acres)	number of tenements	number of families
1	173.8	216	1758
2	78	7	35
3	104	35	312 (estimate)
4	83.3	471	4362
5	160.2	234	1598
6	101.1	423	3975
7	206	1500	17597
8	177.1	871	5531
9	305	2283	13,885
10	109	1179	15,313
11	213	2031	20303
12	5920	11005	94,235
13	109	1123	13195
14	108	642	6762
15	225	533	3938
16	318	1533	10581
17	266	2877	28035
18	500	1323	10501
19	1851	5,720	47,581
20	418.7	2791	20,257

Table 1. Numbers of tenements and occupying families, 1900
(Veiller 1903)

Table 1 lists 36,797 tenements with 319,745 occupants. The discrepancies between Riis's numbers and Veiller's are apparently due to Veiller's attempt to count tenements and Riis's desire to show how bad the city could be.

Rent for tenements varied. Riis gives the impression that rents were based mostly on what the landlord could get the tenant to pay. Rates quoted by Riis include eight dollars a month for space under some stairs (Riss 1998 [1902]:95), which, he claims, is the worst case of landlord abuse encountered. Other rents include a dollar a week for sheds in a courtyard, ten dollars a month for flats, twelve if they got light (Riss 1998 [1902]:100). One newspaper account indicated people paid fifteen cents a night for bed space in a damp cellar (New York Times December 9, 1866).

C. A. Mohr provides statements about conditions in tenements from the viewpoint of an inspector of tenements (Mohr 1903). He likens the narrow air shafts to the inside of Swift and Co., a meat packing plant, to convey the rancid and foul smells (Mohr 1903:427). Mohr describes extreme filth and dilapidation.

Despite the descriptions from Mohr and Riis, tenements varied in their condition and cost. Not all were slums and not all were occupied by criminals and wretches, as has been portrayed (Riis 1890; Nevins 1927:320). With such a concentration of people in New York City, tenements were not the exclusive abode of the poor. Wage labor workers occupied a large part of the tenements in the city. Some occupants had clerk level positions. Nutritional studies

conducted in New York's working class areas in late 1890s identified a shopkeeper, jeweler, sailors, mechanic, porter, builder, and longshoremen (Atwater and Bryant 1899, Atwater and Woods 1898). These studies were conducted on the Lower East Side. In the 1898 report this is called a poorer neighborhood, while in 1899 it is identified as a congested area. Nationality and incomes of the people were noted showing a variety of ethnic heritage and income.

The range of incomes listed in these studies are described as ranging from insufficient to procure basic necessities to an amount on which other people can live comfortably (Atwater and Bryant 1899:9). Griggs (1999) work, presented in *Historical Archaeology* illustrates the presence of people living in tenements whose income was more than basic. DeForest and Veiller (1903) included a number of testimonies from tenement dwellers. The variety of conditions and occupants is expressed in these statements. In some, blame for poor conditions is laid with the landlord, in other cases with the class of tenants. In one testimony, a direct statement about how the quality of buildings, even those adjacent to each other, varies sharply.

Comparisons between working class people in early 19th century New York, and those in Europe, highlights a significant reason for mass migration to America. The standard of living was notably greater in New York. In New York, working class people were able to dress better than their European counterparts (Stott 1990:174). Many workers had clothes like their boss (Stott

1990:175). Watches, expensive and uncommon in Europe, were common among workers. Meat and white bread were standard fare for the working class in New York, but in Europe course grey bread was the staple (Stott 1990:177).

Those that could afford to commute sought to remove themselves from the congestion of downtown Manhattan. During the 19th century public transportation developed that allowed people to live some distance from work. The construction of the Brooklyn Bridge was authorized 1867. Construction began in 1870 and the bridge opened in 1883. Prior to the completion of the Brooklyn Bridge, 13 different ferries operated between Manhattan and Brooklyn (Berrol 1997:80). Grand Central Station and the era of the subway opened in 1871.

These new middle class neighborhoods were outside the economic reach of many working class people, both for the cost of the house and the cost of travel to work (Cargill 1903:331). The new neighborhoods were built for those looking for better living than the dirty, crowded existence of lower Manhattan. Largely, these people were earning more than the laborers of downtown.

The more common dwelling types in cities was the single family or duplex home (Barrows 1983:397). Twenty six houses built in 1878 on Warren Place, Brooklyn cost \$18 per month and were occupied by people working across the East River in Manhattan (Cargill 1903:333). As early as 1867, one third of the people living in Brooklyn worked in Manhattan (Burns and Sanders 1999:154).

In 1893, Brooklyn was referred to as the sleeping room of New York, the home of the “married middle people” (Harpers Magazine (1991 [1893])). An entire house could be rented for \$25 to \$50 a month, or about half of the rent of a tenement in New York. A large part of the population of Brooklyn worked in New York at jobs that payed from \$1,500 to \$3,000 per year (Harpers Magazine (1991 [1893])).

In 1870 some apartments, called flats, were built at 142 East Eighteenth Street, Manhattan. Each apartment contained six rooms and a bath. Rent was \$1,000 to \$1,500 a year (Nevins 1927:208). Other flats at Central Park had eight rooms plus a bath and contained hot water, a kitchen range, and elevators (Nevins 1927:209). The more expensive of these buildings were occupied by people such as G. P. Putnam and the Spanish Consul (Nevins 1927). But the flats at Central Park, renting between \$75 and \$150 a month would have been home to better off middle class families.

Along with moderate housing available in many tenements and the new neighborhoods, inexpensive goods, including furniture, were available. Many working class people had bedframes, comfortable chairs, book cases, and rugs (Stott 199:173). Laborers in New York experienced a standard of living that allowed them to purchase the increasingly inexpensive goods available from the new industrial world. Working class families were often two-income households (Dubofsky 1996:14). With adjustments for price level changes, daily and annual wages rose 50% between 1860 and 1890 (Dubofsky 1996:18).

The middle class had sufficient income to afford a comfortable lifestyle: adequate housing, furniture, education for their children, and some luxuries. Resort vacations, the circus, and professional sports - like baseball - developed and were supported by middle class people. Croquet was popular with those who had a yard. Theater, dime-store novels, *Popular Science Magazine*, and a series of household or lady's journals, all proliferated with the growing middle class (Schlesinger 1933:220).

Changes in the social relations of women altered family structures. Glenna Matthews suggests that the middle portion of the 19th century represented the height of domestic achievement for women and that this was an important aspect in the rise of the middle class (Matthews 1987).

Outside of the home, women's clubs - like the Sorosis - developed in reaction to exclusion from the mens' clubs and dinners (Nevins 1927:342). The Young Women's Christian Association (YWCA) was developed as an analogy to the Young Mens Christian Association (YMCA). Created for women working in stores and offices, this organization did not reach the new immigrants of the working poor (Nevins 1927:346).

In the last quarter of the 19th century about one third of residents of Manhattan were white collar workers. Less wealthy yet professional people like shop owners, technicians, etc., increased their wealth. By 1890, most of the highest paying jobs were held by Anglo/American Protestants. Anglo/Americans and Germans filled most of the lower white collar jobs and Germans

predominated in skilled and semi-skilled labor positions. Labor jobs were largely filled by those of Irish descent (Hammack 1987:83). There was obviously some correlation between status and ethnicity. As Italians entered the city in large numbers toward the end of the 19th century, they entered the workforce at, or near, the bottom.

There was a wide gap between the income of the wealthy and the poor. For example, the *Iron Molders Journal* claimed that if every iron worker in America contributed \$100 a year it would take 85 years to match the fortune Cornelius Vanderbilt had in the bank (an estimated \$85 million). The average pay for iron workers was about \$400 annually in 1890 (Bruce 1959:25). Skilled master workmen masons in New York state were paid between \$2.50 and \$3.36 a day in 1891. In the country, farm workers were paid about \$1.25 per day. If farm laborers were provided room and board, they made between \$15 and \$20 a month (Wright 1895:222).

Wages of families provided in dietary studies conducted in New York City between 1895 through 1897 indicated skilled workers made between \$8 and \$20 a week (Atwater and Woods 1898; Atwater and Bryant 1899). Unskilled laborers earned as little as \$1 a week. Two land lords in the study had incomes of \$50 and \$80 a week. The wages provided here are in accord with those presented by Wright (1895).

There were at least two groups to the new middle class. These include small business owners and clerks for the large corporations. The economic

realities of these two groups was opposed. The clerks of the large corporations had a vested interest in the well being of their company. When the company did well, so did they. However, as the large corporations expanded small businesses were hurt. Stowell (1995) points to conflict between railroads and small business over street space and between other forms of transportation.

At the end of the Civil War, most Americans were self employed and farming was the biggest industry. By 1920 the vast majority of workers were employed by someone else (Dubofsky 1996:3). As factories grew and national markets developed, many business decisions were divested to managers and middlemen (Weibe 1967:21). With increased expansion of industries in the 1880s, workers found themselves relegated to a position in which class consciousness was politically useful (Weibe 1967:47).

Through the 19th century, New York City developed as the economic center of the nation. Great wealth was concentrated into the hands of a few men such as Cornelius Vanderbilt, Andrew Carnegie, Philip Armour, and John D. Rockefeller.

The super rich built mansions that were large and extravagant. Beginning in 1883, with the Vanderbilt mansion, a two and a half mile row of mansions was built along Fifth Avenue (Burns and Sanders 1999:183). By the 1850s indoor plumbing and gaslight were present in New York City. At first, these amenities were available only in wealthier areas (Stott 1990:172). Some wealthier individuals also had furnaces and central heat. Telephone service

began in lower Manhattan in 1878. In 1882 Thomas Edison brought electric lights to Manhattan.

By 1883 there were 1,265 millionaires in New York City, 30% of all those in the United States (Hammack 1987). By 1892 almost half of the millionaires in the United States had a residence in New York City (Burns and Sanders 1999: 183). Cornelius Vanderbilt - as the owner of a railroad - had income and wealth greater than any blue collar worker could hope to achieve. More typical of the economically well-off businessman was Henri Mouquin, who came to America from his native Switzerland around 1840. After a brief period of work at New York's famous Delmonico's Restaurant, he traveled, finally settling back in New York City in 1857 (Morin et al:III-13). Mouquin opened a series of restaurants and was a prominent wine importer (Morin et al: III-13). When he died in 1933 he was valued at \$900,000.

The amount of wealth in the city attracted many people of various backgrounds and interests. This created divisions among the elites as different groups competed with each other. (Hammack 1987:59).

By the middle of the 1890s, there were five competing groups of social elites (Hammack 1987:65). These include three groups of Anglo/Americans separated along lines of those devoted to wealth, those pledged to ancestry, and those committed to culture: a group of German Christians and German Jews (Hammack 1987:73). Wealth appears to have been a necessity for participation in any of these groups. An invitation to a party at the Astor's, required wealth

and heritage (Hammack 1987:76). By the end of the 19th century, power was dispersed. The wealthiest and most powerful were of German or British descent and protestant but wealthy Catholics, Irish, and Jews and organized groups of these “others” existed in New York City (Hammack 1987).

The extravagance of the super rich people stood in direct contrast to the vast numbers of working poor in the city. In *The Decline of American Gentility*, Stow Persons contrasts the restraint of the old (antebellum) aristocracy with the opulent and “grotesque” displays of the new elite (Persons 1973:277). The older mercantile elite families were supplanted by super rich businessmen as the social elite. Many of the management positions that were the employ of middle class were filled by the descendants of these older families (Hammack 1987:51).

One of the aspects of social life among upper status people were social feasts. This custom of dinner giving dates back into the 18th century and possibly earlier. These dinners were feasts that helped solidify the alliances among the participants. Status was reinforced by excluding individuals of lower class. The types of food served and the equipment for the meals was beyond the economic means and social education of lower class people. All of these features are characteristics of the diacritical feast (Hayden 1996, Dietler 2001).

As the symbols of the old gentry, including dinner giving, were degraded from above by newly made millionaires, the means of disseminating the customs of gentility were taken from schools and sold in books (Persons 1973:280). Etiquette books illustrated how to set a table, to greet people, and other aspects

of polite deportment. The higher moral ideals of gentility were found in literature (Tomsich 1971) and popular magazines (Persons 1973; Tomsich 1971:5) and were expressed in activities like the Temperance Movement. This dispersal of gentility to a wider portion of the population is seen as a characteristic of mass society (Persons 1973:284) and was a hallmark of the rising middle class in the 19th century. “Ideal culture” is taught in this way to those who aspire to membership of that other group (Naylor1997:11).

With the population of New York City growing through rising immigration and child birth, the social complexity of the city increased. This complexity was marked by formal groups such as the German Jews and informal groups centered around ethnic or economic commonalities. Among the upper status people, diacritical feasting helped define and maintain their position. As shown in the next chapter, an analysis of late 19th century menus can be instructive in understanding the nature of these meals provided the menus can be attributed to special feasting meals or ordinary meals. Calendrically based menus provided in some cookbooks provide the basis for identifying the meats used in feasts and those of regular meals. The next chapter provides the theoretical basis for selecting some menus for analysis and not others.

CHAPTER 4: TEXT SELECTION

In the study of foodways of living groups, calendrical patterning has been identified as an important aspect to be examined (Douglas 1975, Gross 1984). Mary Douglas states that meals are ordered through calendrical cycles and the repetition of patterns adds meaning (Douglas 1975:257). Calendrical patterning was also examined by Jonathan Gross (1984). Gross, like Douglas, identified three calendrical events, astronomical or meteorological, life-cycle, and reciprocity. Astronomical events may be scheduled holidays, such as Christmas. Life-cycle events include weddings and other events that do not recur on a scheduled basis. Reciprocity events is a broad category where the hospitality of the meal is either expected to be returned or is being returned (Gross 1984: 223)

Weekly scheduling of meals was also noted by Goode, Curtis and Theophano (1984). Menus were recurrent, with variation, within day and meal slots, arranged on a weekly pattern. The structure of Sunday meals was between those of weekdays and holidays (Goode, Curtis and Theophano 1984:152) while Saturday meals have taken a new (Americanized) form. Sunday meals, according to Goode, Curtis, and Theophano (1984:184), are the most elaborate meals in the weekly cycle and a model for celebration meals. Like Goode, Curtis and Theophano, Mary Douglas (1975:257) recognized a variation of meal structure from regular meals to holiday meals. Structure may include the way the meal is presented, the arrangement of foods, food styles, setting, and other components.

Goode, Curtis, and Theophano (1984) see weekday meals as the fixed elements of daily schedules (1984:176). Weekend meals are patterned differently from weekday meals (Goode Curtis and Theophano 1984:177). These pattern differences are believed to be due to the different types of activities that occur on weekends. Two highlights of the weekend meals are Saturday breakfast and Sunday dinner. Sunday dinner is the most well attended meal.

Holiday meals, or feasts, are described by Goode, Curtis and Theophano (1984) as being in six possible formats among their study group. The first is described as an elaborated Sunday format. The elaborated Sunday pattern is also used during “content specific meals” which are calendrical holiday meals. Other holiday meals, the life change meals, are conducted in various formats.

The example of the Italian American meals presented by Goode, Curtis, and Theophano (1984) identifies three levels of meals. On the extremes are weekday meals and holiday meals. Between these are Sunday dinners that are both the most elaborate weekly meal and a model for holiday meals. As will be seen later, this same three tier arrangement is visible in the menus used in this study. By comparing and contrasting these types of meals, the basic signifiers of formal feasts and informal meals can be identified.

Content of meals on weekdays, including Sunday, operate within the household structure, being influenced to varying degrees by individuals within the household. In contrast, feasts are more public and more subject to social sanctions (Goode, Curtis, and Theophano 1984:208). The holiday meals, then,

are more likely to reflect the place of the family holding the meal within the larger social context.

The structural relationship between holiday meals, Sunday meals, and social feasts provide an important element in this study. Feasts can be an arena for social and political action (Dietler 2001:66). The concept of the diacritical feast (Hayden 1996; Dietler 1996, 2001) is directly applicable to late 19th century status studies. A diacritical feast is one where status is reinforced through inclusion in or exclusion from an elite group and where status of the group is displayed (Hayden 1996:129). The two material aspects of this type of feast are specialized foods and style of consumption (Dietler 1996:98).

The style of consumption of late 19th century social feasts were elaborate with multiple courses, specialized utensils and vessels for different foods, elaborate rules of manners, and a specialized room for the meal. For an indication of the attention given to manners, one has only to look at Arthur Schlesinger's 1946 publication of *Learning How to Behave*.

The menus represent an ideal rather than a real set of meals. Imbedded in the menus is information about the social value of meat. Certain meats are appropriate in some situations, such as holiday dinners and social feasts and not others. Some foods are for breakfast, others for dinner. There is, therefore, a ranking of social value for meat that is established by use. This ranking, imbedded within the menus, should also be expressed in real meals served and, through archaeological study, observable within the remains of those meals.

Selected Texts

The analysis of menus, as conducted in this study, relies on calendrically based menus. With such menus, meals of holidays, sundays, and “regular” days can be sorted and compared. Special occasion and holiday feasts can be isolated from everyday meals. This allows for the identification of patterns indicative of feasts. Elements of diacritical feasting, in the terms Dietler and Hayden have laid out, become visible. The elements identified can then be sought in the archaeological record.

A number of cookbooks were examined prior to beginning this work. The Bitting Collection, at the Library of Congress, is one of the largest cookbook collections in the United States. Most of the cookbooks examined were recipe books with little additional content. However, there is a range in content among cookbooks (Appendix I). While many of these contained information ancillary to this study, the menu analysis required the book to contain calendrically based menus. Sporadic menus appearing in magazines and journals were thus not suitable for this study.

During the late 19th century there was a proliferation of cookbooks available on the American market. Information in these books ranged from simple recipes to detailed instructions on creating home remedies, cleaning supplies, and for proper etiquette. To indicate the breadth of information in the books, many had titles like *The New World's Fair Cook-Book and Housekeeper's Companion* (Porter 1891), *Common Sense in the Household* (Harland 1884), or

The Successful Housekeeper (Ellsworth and Dickerson 1882). Some works featured opulence (Ranhofer 1895, Fillipini 1891). Others were aimed at more frugal homes (Rorer 1886; Neil 1884; Townsend 1890).

Two works stand out as extravagant, *The Epicurean* (Ranhofer 1893) and *The Table* (Filippini 1891). Both men worked at Delmonico's restaurant. Both men were born and trained in France. Delmonico's was the most influential restaurant of the 19th century and these two men were part of the reason.

Ranhofer was the head chef for Delmonico's from 1862 to 1898 with a short hiatus between 1876 and 1879 (Thomas 1967). *The Epicurean* is self described as being a Franco-American Culinary Encyclopedia. Within the nearly 1200 pages are directions on how to serve a meal, what seasons different fish are available, recipes, occasional menus from Delmonico's dating from 1861 to 1894 (all in French) and bills of fare for various numbers of diners. However, the menus are not calendrically based and therefore the *Epicurean* is not used in this study.

Allessandro Filippini began working at Delmonico's as a chef and was later promoted to the manager of Delmonico's lower Broadway location (Thomas 1967:261). Filippini's book, *The Table: How to Buy Food, How to Cook It, and How to Serve It* was first published in 1889, five years before *The Epicurean*. *The Table* includes chapters on how to set a table, how to serve meals, and how to carve meats. There is a chapter on the markets of New York City. Also

included are recipes and a complete set of menus featuring an entry for every meal of an entire year. There are also some special menus from state dinners.

Less extravagant cookbooks often exhibit the same chapters as *The Epicurean* and *The Table*. *Peterson's New Cook Book* (Peterson 1864) contains sections on how to purchase different meats, food recipes, as well as medicine recipes and household concoctions like cleaners and ink. No menus are provided in this book, which is more typical of cookbooks.

Typically, recipes are the major focus of cookbooks. *The Every-Day Cook-Book* (Neil 1884) contains recipes and some household tips (such as how to make a clear fire in the stove). Similar in content is the *Compendium of Cookery* (Blakeslee, Leslie and Hughes 1890). The book mostly consists of recipes with some household tips and advice on how to buy foods at market and to carve meats. One of the more famous books done in this format is the *Boston Cooking School Cook Book* (Farmer 1896).

Practical Cooking and Dinner Giving (Henderson 1887) is more focused by providing detailed information about how to serve a meal, including table setting and etiquette, along with recipes. Another member of this group of books is *The Century Cook Book* (Ronald 1895). Like *Practical Cooking and Dinner Giving*, *The Century Cook Book* is focused on recipes and proper instruction in serving dinners and other food events.

Another class of books that expand beyond the recipe centered format of cookbooks are generally referred to as housekeeping books. Examples include *The Housewife's Library* (Peltz 1883). This work includes recipes and marketing information but also chapters on home decorating and furniture, on raising children, games, dealing with emergencies, and manners. *The Successful Housekeeper* (Ellsworth and Dickerson 1882) likewise contains recipes and instructions for dinner giving. The book further includes information about caring for the home including making paint, keeping an aquarium, first aid, raising children and other "odds and ends".

An extreme example of this type of work, in truth not a cookbook at all, is *The American Woman's Home* by Catharine E. Beecher and her famous sister, Harriet Beecher Stowe (1869). Beecher and Stowe provide chapters of Christian philosophy. There are chapters devoted to improving health in the home through ventilation, exercise, and nutrition. Cleanliness and beauty are discussed as are domestic manners and economy. *Home and Health and Home Economics* (Fowler and Puy 1879) is another example of this type of book. Three chapters provide a range of advice from what to read to making cement.

Four cookbooks were included in the menu analysis. These include *The Table*, written by Alessandro Filippini and published in 1891; *The White House Cook Book*, by F. L. Gillette and Hugo Ziemann (1887); *Practical Housekeeping* from Buckeye Publishing Company (1890); and *Imperial Cook Book*, by Mrs.

Grace Townsend (1890). The most critical factors in text selection are: all of these works are in English, all have calendrically based menus, and all have a publication date within the last 40 years of the 19th.

The Table

The Table contains 240 pages of recipes as well as many other chapters. The book begins with a brief chapter titled The Pleasures of The Table. A discussion follows on the New York City markets, and the varieties of fish and vegetables available at different times of the year. A few pages are devoted to setting a table, serving a meal, and carving meats. An important component of *The Table*, for this study, is the 125 pages of menus that cover all meals for an entire year.

Recipes in the book are organized into broad categories. Soup comes first, as it does at dinner. Stock, sauces, forcemeat, and garnishes are second. The third group is hors d'oeuvres. Fish comes fourth, followed by eggs. Meats are not grouped into a large meat category, but rather are presented according to the meat type. Beef is followed by veal. Mutton and lamb are grouped together and pork is presented last. Poultry, containing chicken, turkey, and squab, respectively, is presented as a group. The category of game includes a large variety of birds as well as venison, antelope, and hare. Behind these meat types is a section on vegetables, followed by desserts. There is also a small supplement of recipes with representatives of most of the above categories.

The tone of *The Table* is that of a high economic status. While there is some use of French in the work, it is not as obviously French as *The Epicurean* (Ranhofer 1895). The dinners presented in the menus are 12 course meals.

One of the noted features of *The Table* is the variety of foods called for in the menus. A variety of game animals such as antelope, canvasback duck, snipe, grouse and plover are present. Also, some menus call for foods that are out of season locally. A menu for December 31st includes fried soft crab.

The White House Cook Book

The edition of *The White House Cook Book* used here was printed in 1894. The original publication date was 1887. Hugo Ziemann and Mrs. F.L. Gillette authored the work. Ziemann was a French chef who served French nobility, and worked at the Hotel Splendide in Paris before moving to the United States. In the states he worked at the Brunswick Cafe in New York City and at the Hotel Richelieu in Chicago before taking a position as steward of the White House. Little mention is made of Mrs. Gillette, other than she made a lifelong study of cookery and housekeeping (Gillette and Ziemann 1894). The intended audience of *The White House Cook Book* is believed to be middle class to upper class. Clearly there are some pretenses of grandeur in this work evidenced by the title and association of the book with the White House.

The White House Cook Book begins with a section on carving. Included in this section are illustrations of a cow, veal, sheep, pig, and deer which show

butcher cuts. These cuts are identified by name and the usual cooking techniques are listed for the cuts. For beef, the cuts are also arranged by class, that is according to their quality with first class including sirloin and fifth class including shin.

After the description of butchering, recipes commence. Recipes are grouped with soup coming first. Soups are followed by fish, then shell fish, then poultry and game. Poultry and game list turkey first, then chicken. Wild birds follow chicken then wild mammals are included.

Meats follows poultry and game. After a brief introduction beef recipes are given. Mutton and lamb are presented in a separately titled category after beef. Pork follows mutton and lamb. A section on sauces for meat and fish comes after pork. Other sections of recipes include salad, pickles, vegetables, macaroni, butter, and cheese, eggs, omelets, sandwiches, bread, biscuits, toast, cakes, pastry, custards, ice cream, puddings, preserves, canned fruit, colorings, confectionary, and beverages.

After the recipes comes a selection of menus. These menus are for one week of each month for a year plus holiday meals. Following the menus is a section on management of state dinners. Ten pages of recipes and suggestions regarding sick persons and health are then included among other miscellaneous

categories. Four pages are given to points of etiquette and dinner giving.

Practical Housekeeping

This work was published in 1890 as a revision of *Buckeye Cookery and Practical Housekeeping*, first published in 1881. This edition eliminates the regional focus of the earlier editions. No particular author is credited with this book. Arrangement of the text is by alphabetical order of the sections in keeping with the economy-minded tone of the book. Economy of time and money is evidenced throughout the work, even in the menus. This book is viewed as being aimed at an educated middle class audience.

Within this work are menus for a variety of foods, information on how to set a table, instructions on meat carving, dress making, and other household tips. Menus for each meal for an entire year are presented. Three meals a day, breakfast, dinner, and supper are presented, with dinner being the big meal of the day. Many of the supper dishes are leftovers and cold meats like bologna.

Imperial Cook Book

The *Imperial Cook Book* was written by Mrs. Grace Townsend. The work was published in 1890 by L.P. Miller and Co. Like *Practical Housekeeping*, the *Imperial Cook Book* was a self-proclaimed book for economy and practicality. This book is included here as representing middle class meals.

The book begins with bills of fare for holiday meals. Menus for all meals on New Year, Easter Sunday, Forth of July, Thanksgiving, and Christmas are

given. This is followed by soups, then a section on fish, frogs, and eels and then shell fish. Poultry and game are grouped together and precede the chapter on meats. In the meat chapter, beef is first. Veal is second, followed by mutton (including lamb). After mutton is pork. A chapter on meat and fish sauces follows.

Bread recipes follow meat and fish sauces. Several chapters are devoted to sweets and condiments. Eggs and vegetables are given separate chapters. There is a chapter on fragments (leftovers) and one for lunches picnics and parties. Toward the back of the book is a section on carving followed by bills of fare. A chapter titled The Dining Room is present as is one for the nursery. Other chapters include perfumes and toilet recipes, dyeing and coloring, the laundry, weights and measures, time tables, when food is in season, and miscellaneous. Other sections include: Dainty breakfast dishes, toasts, and mushes, eggs, vegetables, salad, cakes, pastries pies and tarts, puddings and dumplings, dainty dishes for desert, ice cream and ice, water ice and sherbert, hot and cold drinks, fresh fruit, pickles spiced fruit and vinegars, dairy products, canned and dried fruit, preserves and jellies, and catsups.

The section on carving includes meat charts similar to those in *The White House Cook Book*. These charts include information on relative value and use nearly identical to that found in *The White House Cook Book*. The chapter on the dining room includes etiquette rules for serving and dining. There are many similarities between this book and *The White House Cook Book* in layout and

information. There are passages in this book identical to those found in *The White House Cook Book* (Gillette and Ziemann 1887: 549; Townsend 1890: 446).

This section on bills of fare differs from those in the front of the book in that they are not holiday meals. Meals for one week of each month are given. Three meals are provided for each day, breakfast, dinner, and supper. This varies on Sunday where the meals are breakfast, dinner, and lunch. Dinners are arranged by course with soup first, main course, then dessert and coffee.

Other Sources

Documents other than cookbooks were examined for information relevant to the purpose of this study. Materials found to be useful include newspapers, U.S. Department of Agriculture publications, books on meat marketing, and other sections of cookbooks.

The New York Times and *The New York Daily Tribune* were examined by viewing all issues for a year at five year intervals. The goal of this study was to find prices for meats in advertisements or market reports. If a pattern was discerned in what section of the paper and on which days prices would be printed, the search was narrowed to target those pages. All issues of *The National Provisioner* available at the Library of Congress were reviewed for marketing information.

Department of Agriculture publications were searched using available indexes. Any publication with a title that seemed to be of relevance was examined. Many of the reports were not relevant to this work. Others provided

information included in this study. Among these are the Atwater studies of household food consumption between 1895 to 1897 (Atwater and Woods 1898; Atwater and Bryant 1899).

While searching cookbooks for menus, other information was identified that could be of use in this study. Such information includes butchering charts and the “value” of the different cuts. There is more information in those works than is presented here including the seasonal availability of different meats, cooking methods, and household tips.

With the menu resources identified, an analytical method was devised that worked along the calendrical aspects of the menus to differentiate between social feasts and regular meals. It was also important that the analysis be done in such a way that it would have relevance to archaeological faunal analyses. Thus the methods presented in the next chapter discuss the types of meat and cuts of meat along calendrical lines as revealed in the menus. Interpretations from the other materials presented in later chapters contribute to the menu analysis by enlightening on market conditions, emic perceptions of meat values, and meat use in households.

CHAPTER 5: METHODS OF ANALYSIS

The analysis of menus from *The White House Cook Book*, *The Table*, *Practical Housekeeping*, and *Imperial Cook Book* was conducted with computerized spreadsheet. All meat dishes from the menus were entered into a database that included the following categories: month, day of the week, date, holiday/non-holiday, meal name, cooking method, animal class, animal type, style, leftover (y/n), recipe reference and meat cut (Appendix II).

Because feasts are scheduled according to life events or calendrical dates, the scheduled nature of the menus was critical. To examine variation according to these scheduled cultural phenomena, the month, day of the week, date, holiday reference, and meal name (breakfast, dinner, etc) were recorded. This information provides temporal reference and was used to separate meals on special days (holidays) from others. Meal name was included to allow investigation of variation on meats within a days meals. Animal class refers to large mammals, small mammals, birds, and such commonly used in archaeological faunal studies. Animal type indicates beef, pig, chicken, mutton and other meats. This information was developed from the menus in order to provide a means of comparison with archaeological samples. Style indicates whether the dish was a soup, stuffed, croquette, steak, etc. While this is not something that archaeologists can determine from their faunal samples, it was deemed relevant here as a useful category.

The cut of meat was recorded to provide comparability between the menus and archaeological faunal assemblages. Some cookbooks numbered the recipes in the book for easy reference. Including the recipe reference number in the data table allowed for quick referral to the recipe to gain additional information about the cut of meat preferred for the dish, or other information. Leftovers were noted in order to avoid counting a meat cut more than once.

In order to provide commonality between the menus and archaeological faunal studies, there must be some common ground. Initially, it was thought that the meats identified in the menus could be “translated” into anatomical elements and that this would provide a bridge between the menus and categories used in faunal analyses. This proved to be impractical on two levels. Some cuts have multiple bones. A ham may have part of an innominate and the proximal end of the femur. On the other hand, some recipes do not always specify which cut of meat to use calling only for a steak or chop.

To connect the menu analysis to faunal remains some form of quantitative estimates are required. Archaeologists have been using such estimates for decades (White 1953, Guilday 1962, Chaplain 1971, Klein and Cruz-Uribe 1984), although these measures have not been used consistently between researchers.

In archaeology the two most basic data fields to be cataloged are the provenience of each fragment and a count. A proper catalog of faunal elements must also identify the animal parts according to the Linnean system of

classification; at least to the extent possible considering the usually fragmented nature of the remains. It is almost never possible to identify every fragment to the species level and, in fact, it is usually impossible to identify all fragments more specifically than the phylum level. The most used categories of taxonomic classification are class, family, genus, and species.

Beside the taxonomic identification of bone fragments, the anatomical position of each piece must be determined. Knowledge of skeletal morphology on a range of animals permits small fragments to be identified to the anatomical element (bone name) including the side of the animal. Further, the exact portion of the element should be cataloged. Measures such as minimum numbers of individuals (MNI), and butchering analysis require these data, although the measures should be derived by examining bones themselves laid out on a table.

Other types of data that may be required for archaeological analysis include the type and location of butchering marks, whether fragments are burnt, and to what degree, presence or absence of rodent or carnivore gnawing, degree of bone degradation and type of deterioration, age-at-death indicators, season-of-death indicators, and evidence of secondary use of bone (tools, buttons, etc).

Collecting metric values of bones and recording pathology is valuable when archaeological samples are used for biological study. Evidence of disease, animal size, and morphologic changes are examined to study past animal

populations. There has been significant change in the size of domestic animals through selective breeding. While obvious to faunal analysts with experience in sites from the 17th century through late 19th century, these changes have not been thoroughly studied. Such measurements are uncommon in historical faunal studies, judging by their relative absence in printed reports.

Various methods of quantification exist for archaeologically derived faunal data, all with specific problems (Grayson 1984; Klein and Cruz-Urbe 1984; Parmalee 1985; Crabtree 1985; Reitz and Wing 1999). Quantification is done to provide a means of comparison within and between assemblages and to allow estimates of the total deposited assemblage.

The number of identified specimens (NISP) is the total number of bone fragments assigned to a particular taxonomic classification. This measure does not take into account the size or fragmentary nature of bones in an assemblage. Some researchers will mend breaks before counting NISP. The most common use of NISP is for comparisons of representation between taxa.

NISP is a relatively easy quantitative scale to work with. Numbers from one provenience can be directly added to another when samples are combined for analysis. No recalculation is required as in MNI. NISP is usually used as a comparative measure, not in raw form, but as percentages.

The weight of each fragment should be recorded in all faunal studies if for no other reason than for consistent comparison between sites. There is a recognized relationship between skeletal weight and body mass in living

organisms. Like NISP, bone weight is easily combined when provenience units are aggregated.

Calculating the percentage of bone by weight between species or classes of animals is a valid means of comparison. Since weight correlates to mass, bone weight nullifies the effects of fragmentation. Many small bone fragments that would seem to indicate a greater representation of the species in NISP calculations could, by weight, be seen in better proportion to fewer but larger bones of another species.

A calculation used for estimating animal representation in a site is the Minimum Number of Individuals (MNI). MNI was made popular in the 1950s by Theodore White (1953). White posed the idea that if the number of animals were calculated, the average weight of those animals could be factored in to provide an estimate of how much meat was available from the given bone sample.

All of the animals of a particular species and from each analytical group, whether a particular provenience, or assembled provenience units, are identified to the element, side, and portion of element level. Once this is done, the most frequently occurring portion of element, with side considered, is determined. For example, if there were five left greater trochanters from pig femurs, three right greater trochantors, and no more than two of any other elements, the MNI for pig would be five. That is there must have been five pigs in order for there to be five left greater trochantors. The other bones from the five pigs that are

not accounted for are assumed to be lost through various means or missed during recovery.

The use of MNI on urban historic sites has severe draw-backs. On urban sites meat procurement of large domesticated animals was generally as individual cuts, not entire animals. Usually, the large domestic animals are the major forms of meat on historic period sites. Thus, the concept and use of MNI as a comparative tool is largely invalidated when dealing with the bulk of bones recovered from historic period sites. MNI has more validity when examining the amounts of smaller animals such as fish, birds, and smaller mammals.

Another problem with the use of MNI, on all sites, is that when different samples are to be examined together the MNI must be recalculated. If the hypothetical sample above were added to another sample that contained a large number of pork elements but no greater trochantors the MNI, based on the count of greater trochantors, would not change. However, there may be other portions, say distal ends of left femurs, that when the two samples are added may exceed five.

One of the uses of MNI is to calculate estimates of meat weight. This is done by calculating the number of MNI for each species and then multiplying that number by an average meat weight for that species. Within each species, however, there is a range of size and weights for adults (Harris 1888; Parmalee 1985). Through the years, with improved husbandry and selective breeding, overall and average size of domestic animals have changed (Harris 1888).

Analysts with experience on the full range of historic sites have seen the significant changes in pork, cow, and chicken remains. Using an average weight based on averages calculated in the late 20th century does not account for these changes. These changes, however, have not been thoroughly studied.

The problems of using MNI on urban historic period sites has led Landon to produce a variant of the measure using animal elements (Landon 1991, 1996). This calculation determines the minimum number of individual elements (MNE) for each species. The process for determining MNE is similar to that for calculating MNI. The problems of aggregation remain the same as with MNI

MNE calculations are valuable in any analysis involving meat cut representation at sites. Also, studies of taphonomy have documented correlations between certain elements and survivability in the ground based on bone density (Chaplin 1971; Guilday 1971; Reitz and Wing 1999:192).

An alternative measure clearly related to MNE is the Minimum Number of Meat Cuts (MNMC). MNMC is a measure that calculates the minimum number of individual meat cuts. This measure is calculated by taking the MNE and applying the names of retail butcher meat cuts to the bone elements. What is sought here is to determine how many porter house steaks, rump roasts, and other meat cuts are represented within the assemblage. In instances where more than one element is included in a meat cut, say a pig foot, the total number and elements within the cut are calculated to determine the fewest possible number of that type of cut.

The value of MNMC is in examining the types of meats consumed at the site level. The site may be a household, tavern, hotel or other institution where people prepared and consumed foods. This form of analysis has been conducted since Peter Schultz and Sherri Gust provided meat prices from Sacramento and proposed examining meat cuts to study the social status of site occupants (Schultz and Gust 1983).

While MNE and MNMC would appear to measure the same thing, there is a difference. Landon uses the MNE because he is not attempting to estimate social variation based on meat cuts. He is, instead, looking to examine market availability of parts. Landon chose MNE because it does not presuppose modern butchering patterns or terms onto past archaeological samples. This form of presentism has been foisted on historical faunal assemblages from the 17th century to the 20th century, for the most part without critical examination.

In examining the menus, the nature of the quantitative measures of faunal analysis were considered so a means of bridging from the menus to archaeologically derived faunal samples could be devised. The menus do not provide weights or bone counts for the portions used in the meals. In some cases the meat cuts were identified, but this was not consistent. When meat cuts are specified in the menus, a correlation can be made with estimated meat cuts derived from faunal assemblages. The minimum number of meat cuts would be a closer approximation to the menus than would be the minimum number of elements.

When working with faunal assemblages, this author prefers to use biomass estimates to gauge the relative percentages of different meats. When working with data without bone weights, NISP is used. With the menus, the most consistent measure was the number of times a meat appeared in the menus. Assuming that a standard portion size was implicit in the creation of the recipes, there should be some correlation between biomass and the number of uses in the menus.

Given these limitations, the analysis presented in the next chapter provides data on the types of meat and cuts of meat as far as the menus will allow. These data are presented to examine various types of meat between holiday and non-holiday meals, over the days of the week, and for different meals of the day. The material representation of diacritical feasting will be expressed in the various types of meats used on holiday meals as opposed to ordinary meals.

CHAPTER 6: MENU ANALYSIS RESULTS

In order to get at social status, the menus were examined for various patterns of meat use. If we examine the four sets of menus for predominant species we find that the four domestic animals cow, sheep, chicken, and pig stand out. Beef and Veal are combined into cow. These calculations include ham, pork, and bacon under the umbrella of pig. For sheep, lamb and mutton are combined. In *The Table*, these four species account for a mere 37.12% of the meat dishes listed (Table 2, Figure 3). On the other end of the spectrum is *The White House Cook Book*, where these species account for 84.59% of the meat dishes. In the *Imperial Cook Book* these animals account for 53.07% of all meats and they are 66.61% of meat dishes in *Practical Housekeeping*.

	TABLE	WHITE HOUSE COOK BOOK	IMPERIAL COOK BOOK	PRACTICAL HOUSEKEEPING
COW	17.48	39.94	23.01	31.37
PIG	3.16	14.15	12.27	12.27
SHEEP	9.12	16.35	8.28	12.55
CHICKEN	7.36	14.15	9.51	10.42
	37.12	84.59	53.07	66.61

Table 2. Representation of major domestic meat types in the cookbooks

In *The Table*, there are 95 meat types listed. Cow, egg, sheep, chicken, oyster, clam, pig, lobster, cod, sausage, sweetbread, turkey, crab, sardine, squab, smelts, bass, and tripe combined account for 75% of the meat dishes in *The Table*.

The four major domestic animals comprise 84.59% of the meat dishes in *The White House Cook Book*. In the *Imperial Cook Book* egg, oyster, tongue, and fish, along with the four major species, make up 75% of the meat. There are 41 other types of meat listed. The four domestic animals plus eggs make up 75% of meat dishes in *Practical Housekeeping*.

What these numbers relate is that the meat portion of the diet during the late 19th century was dominated by domesticated animals. This is not surprising in that a similar dominance exists today.

Menu Analysis: Calendrical cycles

Calendrical patterns of meal taking have been identified as important aspects of foodways (Goode, Theophane and Curtis; Douglas; Gross). The menus, therefore, have been examined according to calendrical aspects. These include holiday and non-holiday, days of the week, and meals of the day.

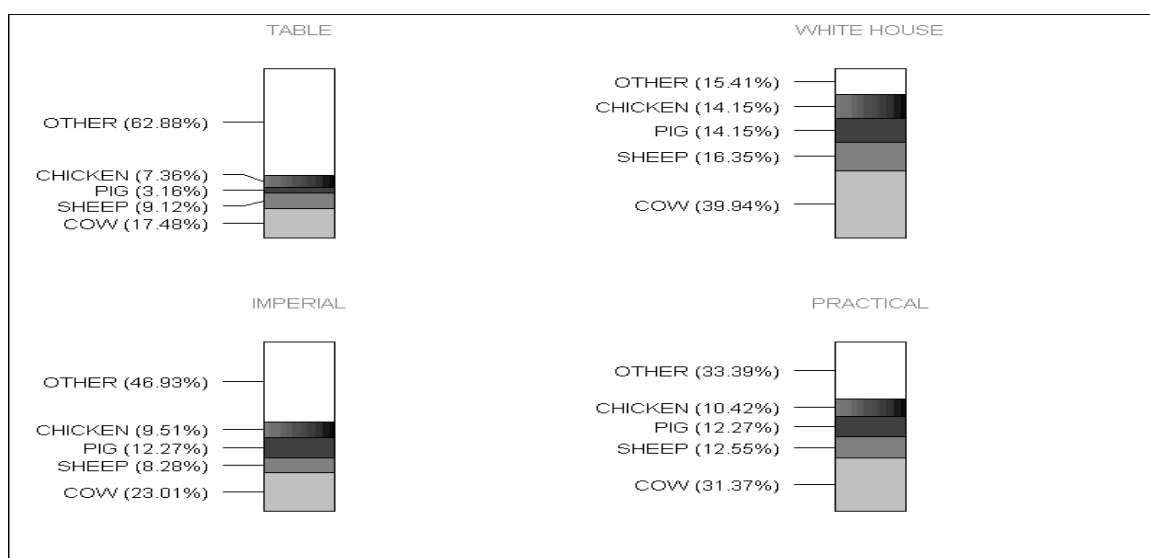


Figure 1. Representation of major meat types

Comparison of holiday and non-holiday meals is considered critical to this analysis. By definition, holidays are special and non-holidays are ordinary. Thus we can compare the two patterns for ideas about what constitutes special and everyday foods.

Holiday versus non-holiday

Only *The White House Cook Book* included menus for social meals outside of a holiday context. State dinners and birthday dinners are presented. Since all of the books include holiday meals, analysis began with comparing holiday to non-holiday meals.

Meals on holidays were segregated from non-holiday meals. The class of animals, types of meat, and meat cuts were contrasted to see how the two groups differed. Meals of the day were not assumed to be equal in social value and they were compared within both groups and between groups.

The Table

In *The Table*, the types of meat were sorted according to their occurrence on holidays. There was a total of 58 meat dishes presented in holiday menus. Those meats served only once are included as “other” in Figure 2. The most commonly served meat for holidays was chicken (9 times, 15.5%) (Figure 2). Beef was second most common with 7 occurrences (12.1%). Oysters were served 5 times (8.6%) and sheep (including lamb) 4 times (6.9%). Lobster, cod, duck, terrapin and crab were all served twice. Other meats served only once include shad, clam, sole, salt mackerel, mutton, turkey, frog, veal, bass, squab,

blackfish, partridge, haddock, doe bird, and mortadella. Pork, including hams, were not listed.

On non-holiday meals, beef was the most commonly served meat: 738 times (17.54%) out of 4,207 meat dishes (Figure 2). This includes 215 veal dishes (5.11%). Eggs were the second most common dish with 389 (9.24%) occurrences . Lamb and mutton combined were third most common with 384 (9.1%) occurrences. This is followed by chicken with 297 (7.06%) occurrences and oyster 282 times (6.7%). All other meat types occur less than 2.5% of the time. There is a total of 96 different types of animals served on non-holiday meals and these are grouped into the “other” category in Table 2.

Another image of relative representation of meats is achieved when the meats are examined by class (Table 3). When this is done with holiday meats, birds (including game birds) and large mammals tied for most common with 15 occurrences each for 25.86% of the dishes (Figure 3). Shellfish are the next most

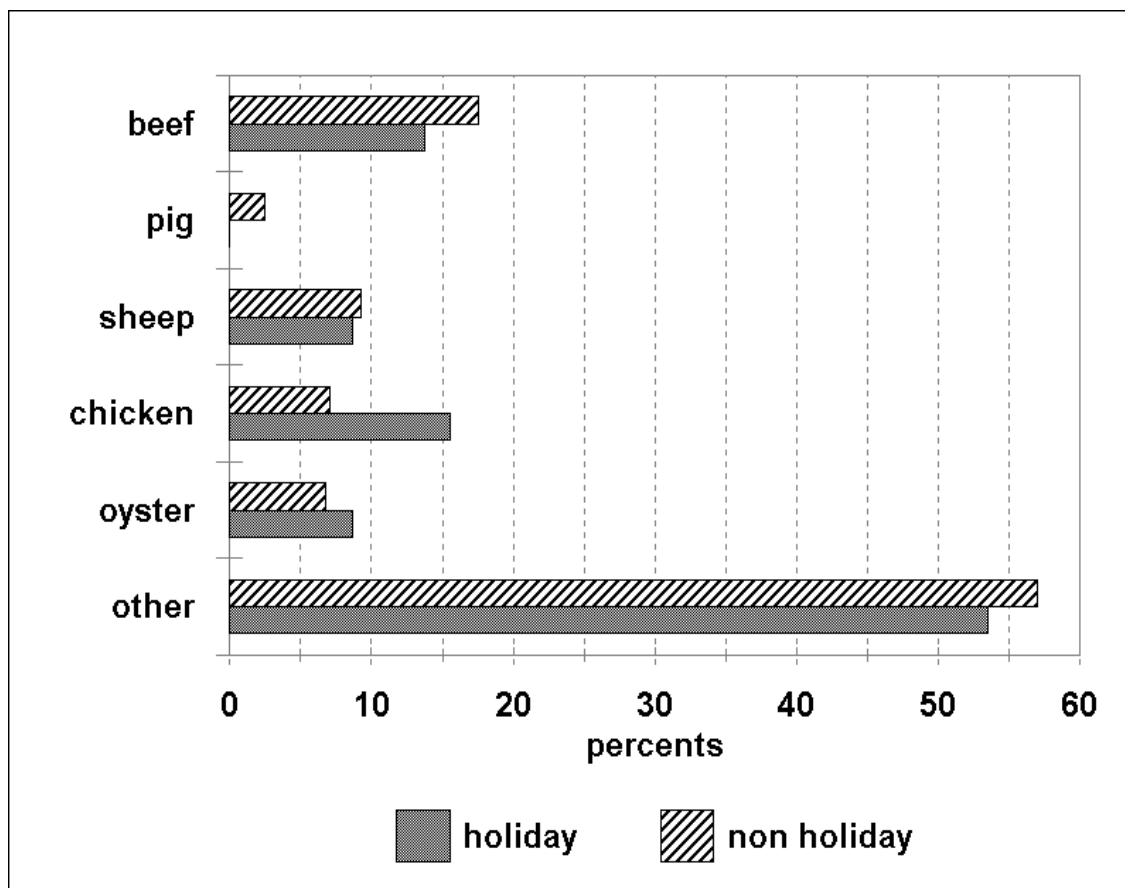


Figure 2. Comparison of holiday and non-holiday meats in *The Table*

common with 10 occurrences for 17.24%. This is followed by fish with 8 occurrences for 13.79%. Eggs were served seven times and reptiles three.

CLASS	HOLIDAY		NON-HOLIDAY	
	N	%	N	%
LARGE MAMMAL	15	25.86	1536	36.51
BIRD	15	25.86	679	16.14
FISH	8	13.79	793	18.85
SHELLFISH	10	17.24	701	16.66
GASTROPOD	0	0.00	59	1.40
REPTILE	3	5.17	50	1.19
EGGS	7	12.07	389	9.25

Table 3. Animals by class on holidays and non-holidays in *The Table*

On non-holiday meals various classes of animals are represented in different percentages. Large mammals are the best represented class with 36.51%. Fish is second most common at 18.85 % followed by shellfish at 16.66%. Birds, including domestic and game birds, account for 12.55%.

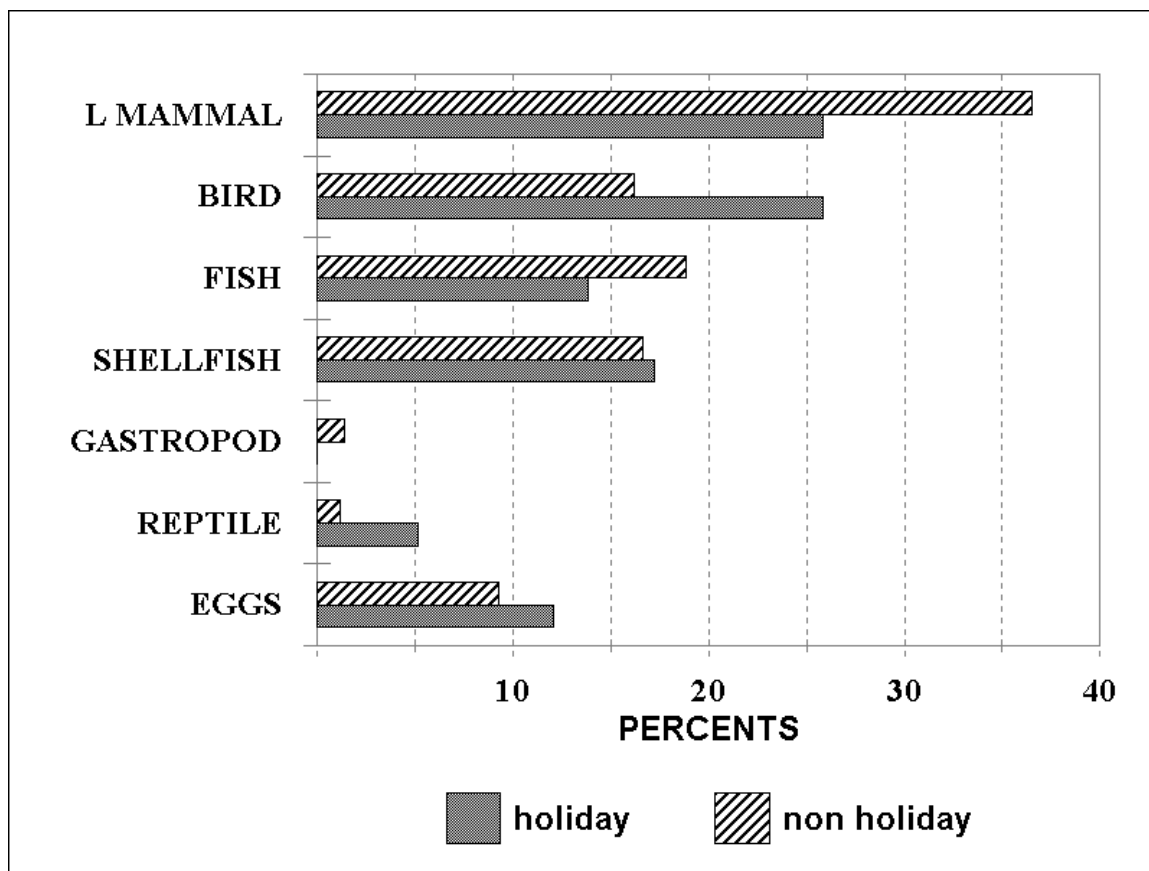


Figure 3. Representation by class between holidays and non-holidays in *The Table*

The changes in representation between non-holiday and holiday meals includes a relative increase in fowl, eggs, shellfish, and reptiles on holiday meals. This corresponds to a decrease in large mammals and fish. This analysis suggests a social status for fowl that is little recognized in archaeological studies. Chickens and other birds are often not considered in status analyses

and when included are treated minimally. Yet in holiday meals, meals of greater social significance, fowl is prominent. When looking at percentages of fowl dishes to the total, fowl occurs 25.86% of the time in holiday meals. During non-holiday meals, fowl represents 15.26% of the meat dishes. Conversely, fish would seem to be of lower status since occurrences are decreased on non-holiday meals.

The White House Cook Book

The menus from *The White House Cook Book* were examined for the representation of various meat dishes between holiday and non-holiday meals (Figure 4, Table 4). There was a total of 52 meat dishes in 15 holiday meals. These include oysters with nine occurrences (17.3%), turkey and chicken with six occurrences each (11.5%), lobster and lamb four times each (7.7%), beef and whitefish three times each (5.77%) and goose, cod, and clam two times each. Served once were pickerel, mince, ham, duck, mackerel, crab, venison, smelts, and sausage. Pig products (ham) are present only once in holiday menus.

	Holiday		Non-holiday	
	N	%	N	%
BEEF	3	6.98	124	32.31
PORK	1	2.33	25	6.49
LAMB	4	9.30	48	12.47
CHICKEN	6	13.95	39	10.13
TURKEY	6	13.95	2	0.52
OYSTERS	9	20.93	29	7.53

Table 4. Comparison of major meats between holidays and non-holidays in *The White House Cook Book*

Looking at class representation, fowl occurs 15 out of the 52 times for 28.85% (Table 5, Figure 5). Large mammals were served nine times (19.23%). Shellfish, however, were the most commonly served meat with 16 occurrences for 30.77%. Fish was served five times and game three times.

During non-holiday meals large mammals were the bulk of meat dishes being served 247 times among 425 dishes (57.17%). Birds were served 55 times for 12.73%. Fish was the second most commonly served meat class with 63 dishes for 14.58%. Shellfish was served 59 times (13.65%). Game accounted for only 1.62 % of the dishes and reptiles just .23%.

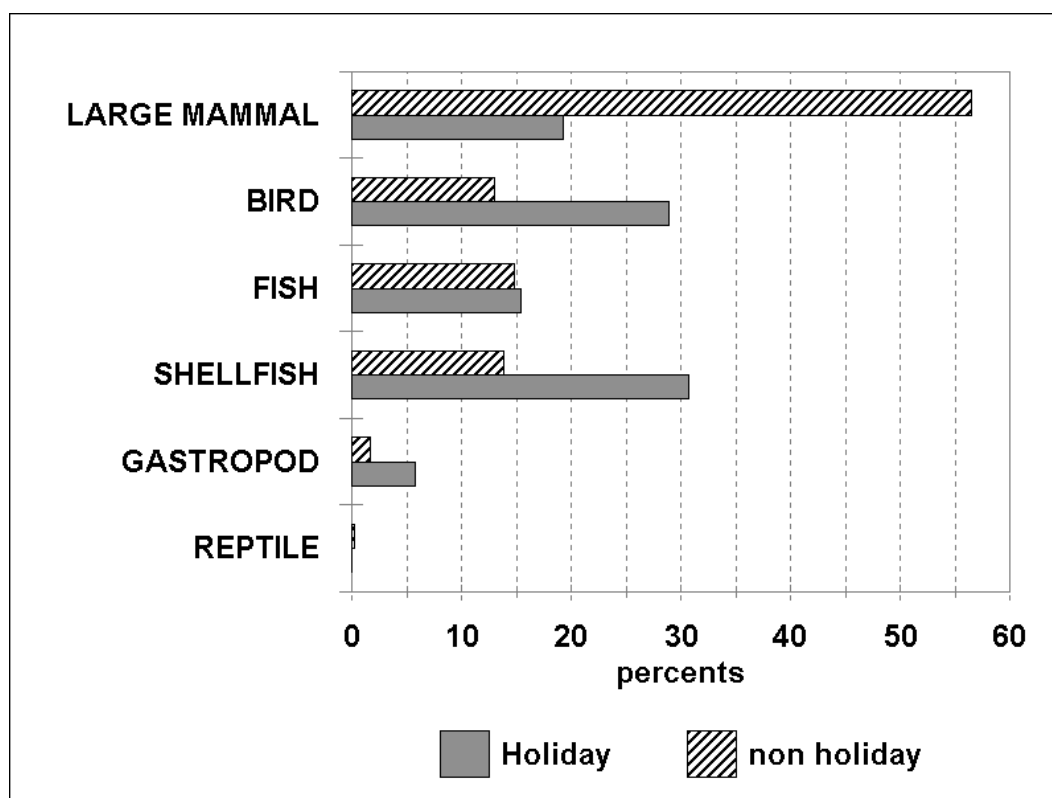


Figure 4. Comparison of classes of animals between holiday and non-holiday meals in *The White House Cook Book*

CLASS	HOLIDAY		NON-HOLIDAY	
	N	%	N	%
Large Mammal	10	19.23	247	57.17
Bird	15	28.85	55	12.73
Fish	8	15.38	63	14.58
Shellfish	16	30.77	59	13.65
Reptile	0	0.00	1	0.23
Game	3	5.77	7	1.62
	52		432	

Table 5. Classes of animals in holiday and non-holiday meals in *The White House Cook Book*

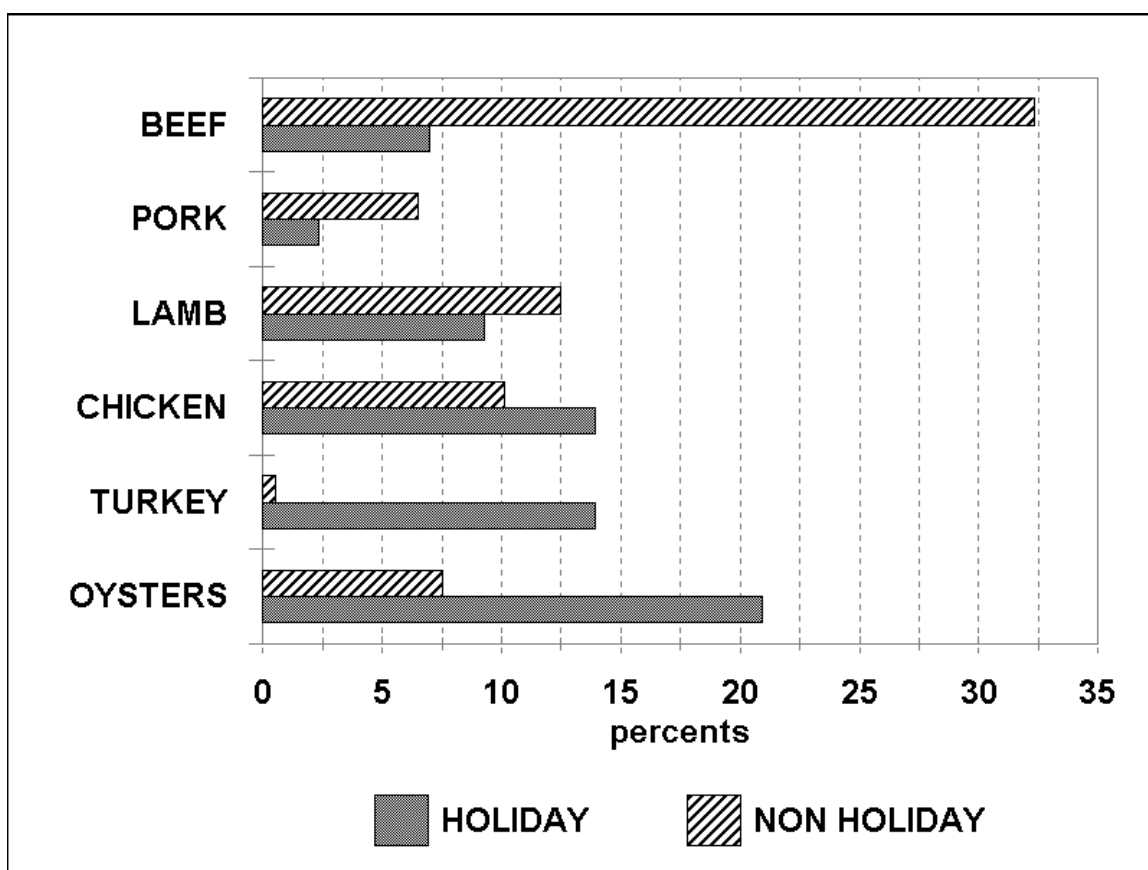


Figure 5. Comparison of meat types between holidays and non-holidays in *The White House Cook Book*.

As with *The Table*, fowl appears to hold a pre-eminent place in socially significant meals. Shellfish are also greatly increased in percentage on holidays in *The White House Cook Book*. Fish shows a slight increase on holidays, in

contrast to a decrease in *The Table*. Large mammals show a sharp decline in percentages as the use of birds increases on holidays.

Practical Housekeeping

A total of 27 meat dishes were present in 15 holiday meals. This is substantially fewer than the 52 meat dishes found in 15 holiday meals in *The White House Cook Book*. Oysters were served six times (31.58%) (Table 6, Figure 6). Chicken was served four times (21.05%) and turkey, ham, and fish (unspecified) three times each (15.79%). Turtle, eggs, and beef were all served twice (10.53%). Mackerel and mutton were served once. Game was not served on holidays.

	HOLIDAY		Non-holiday	
	N	%	N	%
MAMMAL	3	15.79	770	61.6
BIRD	5	26.32	172	13.76
FISH	3	15.79	106	8.48
SHELLFISH	5	26.32	68	5.44
GASTROPOD	0	0.00	14	1.12
REPTILE	2	10.53	1	0.08
EGGS	1	5.26	85	6.8

Table 6. Comparison of meat class between holidays and non-holidays in *Practical Housekeeping*

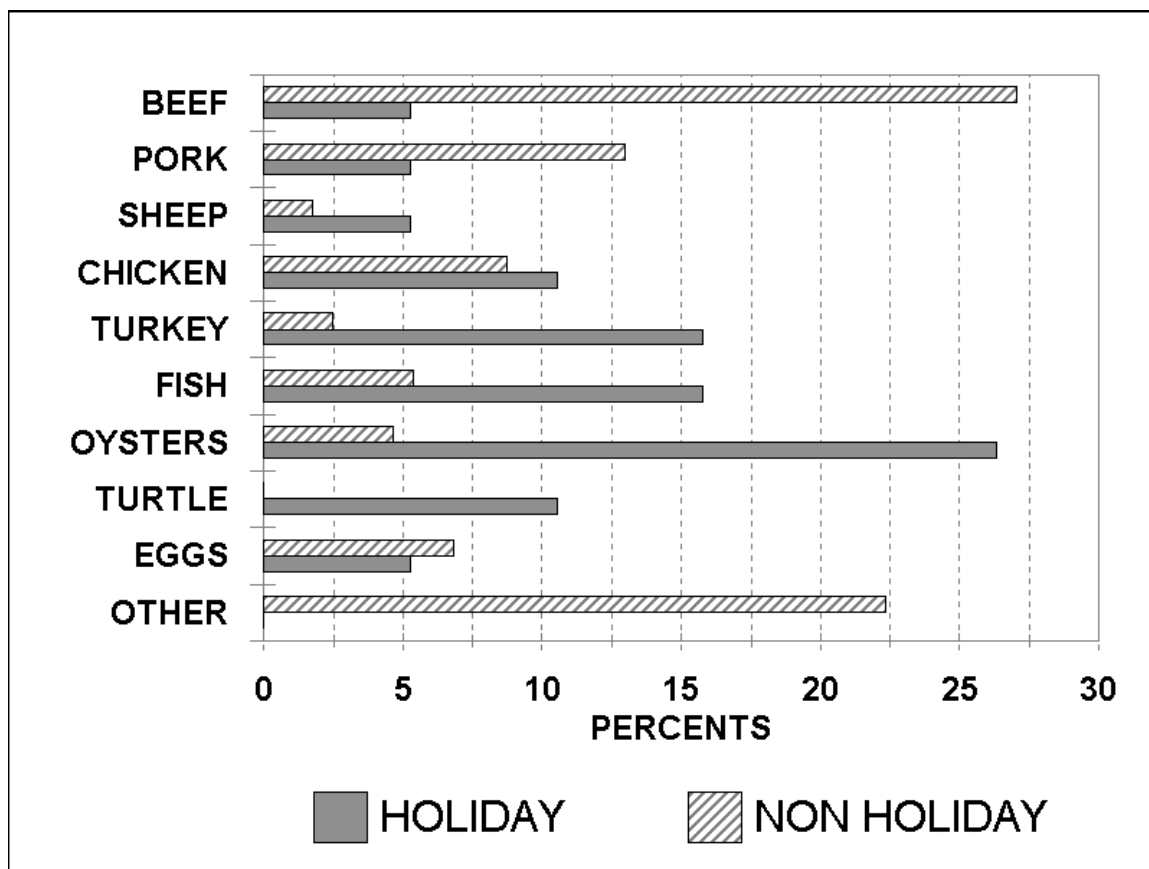


Figure 6. Comparison of meats between holidays and non-holidays in *Practical Housekeeping*

There were 49 different types of meat listed for non-holiday meals with a total of 1,216 different meat dishes, the most common of which are identified in Figure 6. Beef was the most commonly served meat with 273 occurrences (22.45%). With veal included, cow accounts for 27.87% (339 times). This total does not count hearts, kidneys and other organs. Mutton and lamb was the second most common species consumed with a combined total of 135 dishes (11.1%). The third most common meat dish was chicken with 109 occurrences (8.96%). Pork, including ham, accounts for 99 dishes (8.14%). No other meat type accounts for more than 6% of the meat dishes.

At the class level, meat from large mammals was most common on non-holiday meals with 61.6% of the meat dish (Table 7, Figure 7). On holidays, large mammals were served 15.8% of the time. Fowl and shellfish were the most commonly served meat types on holidays, both 26.3% of the time. On non-holidays birds were served 13.7% of the time and shellfish 5.4%. On holidays fish were served 15.79% of the time but just 8.5% of the time on non-holidays.

	HOLIDAY		Non-holiday	
	N	%	N	%
BEEF	2	10.53	338	27.80
PORK	3	15.79	130	10.69
MUTTON	1	5.26	135	11.10
CHICKEN	4	21.05	109	8.96
TURKEY	3	15.79	31	2.55
FISH	4	21.05	69	5.67
OYSTERS	6	31.58	58	4.77
TURTLE	2	10.53	0	0.00
EGGS	2	10.53	85	6.99

Table 7. Comparison of meats on holiday and non-holiday meals in *Practical Housekeeping*

The variation in meat use between holidays and non-holidays seen in *Practical Housekeeping* is similar to, but less dramatic than, that seen in *The Table* and *The White House Cook Book*. Fowl are more commonly served during holidays and beef less often. Pork is present on holidays only as ham. Shellfish and fish use is also more common on holidays.

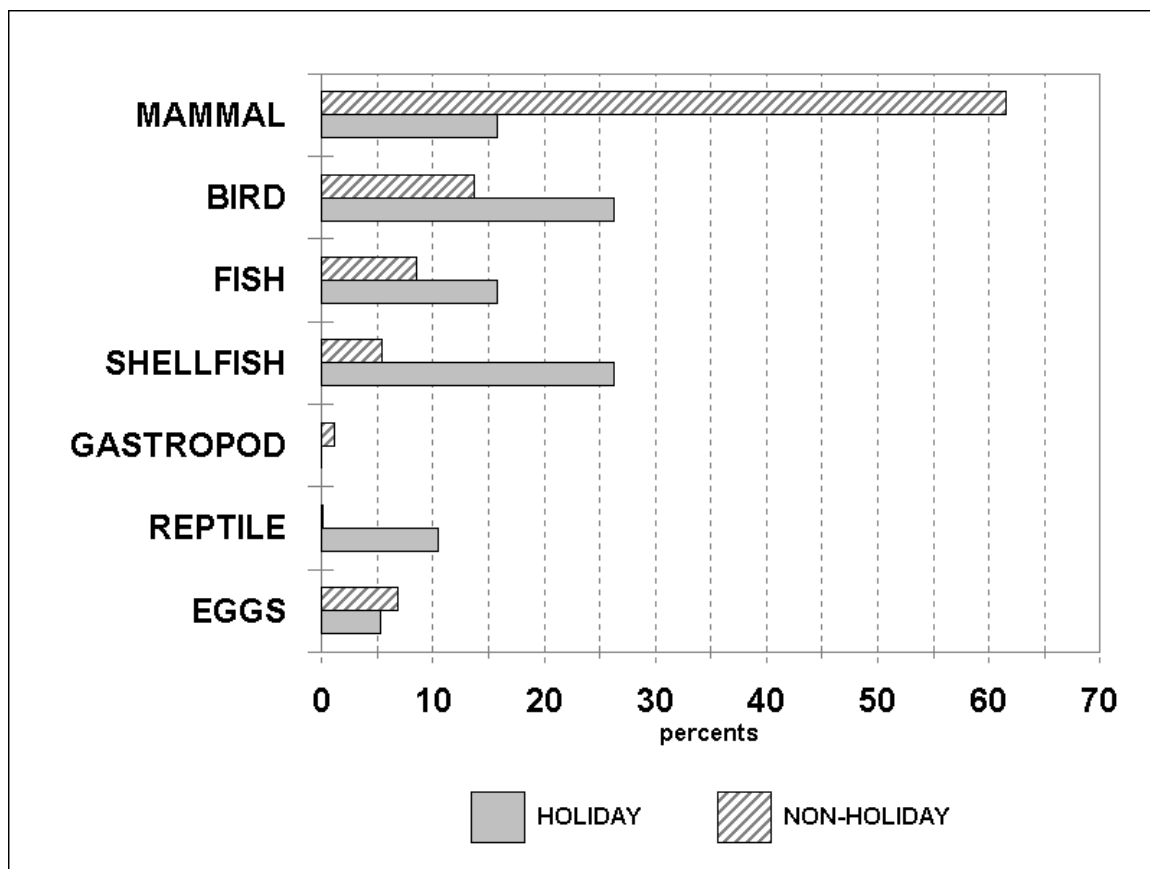


Figure 7. Comparison of classes of animals between holiday and non-holiday meals in *Practical Housekeeping*

Imperial Cook Book

There were 19 meat dishes listed in 15 holiday meals for five holidays in the *Imperial Cook Book*. Beef, pork, mutton, chicken, turkey, duck, ham, fish, lobster, oysters, clams, and turtles were served. Beef was the most commonly served meat, representing 26.32% of the holiday meat dishes (Figure 8, Table 8). Turkey and chicken were tied for second most common with 10.53%. Unidentified fish also contributed 10.53%. Oysters, pork, ham, mutton, duck, eggs, mackerel, and turtle each contributed one item (5.26%).

	HOLIDAY		Non-holiday	
	N	%	N	%
BEEF	5	26.32	54	17.20
PORK	1	5.26	11	3.50
HAM	1	5.26	24	7.64
MUTTON	1	5.26	18	5.73
CHICKEN	2	10.53	29	9.24
TURKEY	2	10.53	5	1.59
DUCK	1	5.26	2	0.64
FISH	2	10.53	9	2.87
MACKEREL	1	5.26	1	0.32
OYSTER	1	5.26	22	7.01
TURTLE	1	5.26	1	0.32
EGG	1	5.26	29	9.24

Table 8. Comparison of meats between holiday and non-holidays in *Imperial Cook Book*

In non-holiday meals, 314 meat dishes including 46 different types of meat are present. Beef was the most commonly served meat comprising 17.19%. Egg and chicken each contributed another 9.23%. Ham represents 7.64%, followed closely by oysters at 7.01%. Mutton and veal each contribute just over 5.4 %. Lamb and bacon each contribute about 2.5%. Fish account for 2.87%. Mackerel, which has been segregated out because of its relative prevalence, add another

By animal classes, large mammals were most commonly served on holidays, representing 43.5% of the meat dishes (Table 9). Fowl comprised 21.7% of the meat dishes. Fish and shellfish were equally prevalent at 13% of the meat dishes served. Reptiles and eggs served in only 4.3% of the meats. Game was not served on holidays.

Variation between holiday and non-holiday meals shows increase in the use of fowl on holidays over non-holidays. It is noteworthy that the fowl included in non-holiday meals includes a wide variety of species, including wild birds. On holidays only turkey and chicken are used. Large mammal use on holidays decreased to 43.5% from 55.6% on non-holidays. Shellfish, fish, and reptiles were served more frequently on holidays than on non-holidays. Eggs were served less frequently and game not at all.

	HOLIDAY		NON-HOLIDAY	
	N	%	N	%
LARGE MAMMAL	10	43.48	174	55.59
BIRD	5	21.74	38	12.14
FISH	3	13.04	21	6.71
SHELLFISH	3	13.04	31	9.90
GASTROPOD	0	0.00	17	5.43
REPTILE	1	4.35	2	0.64
EGG	1	4.35	30	9.58

Table 9. Comparison by class between holidays and non-holidays in
Imperial Cook Book

Interpretation

Most analyses of status examine the types of large mammal meat represented at sites. In *The Table* holiday meals include 13 large mammal dishes. These include seven beef dishes, four from lamb, one from mutton, and one veal. Pork was conspicuously absent. On non-holiday meals beef was listed 453 times, or 12.59% of the total number of meat dishes, and veal another 194 times (5.4%). Lamb was listed 247 times (6.86%) and mutton 100 times (2.78%). Pork products were present with bacon listed 48 times (1.33%), pork 41 (1.14%),

and ham 28 times (.78%). Pork shows up in mundane meals but not on holidays, it is suggested that pork is a lower status food than fowl or beef.

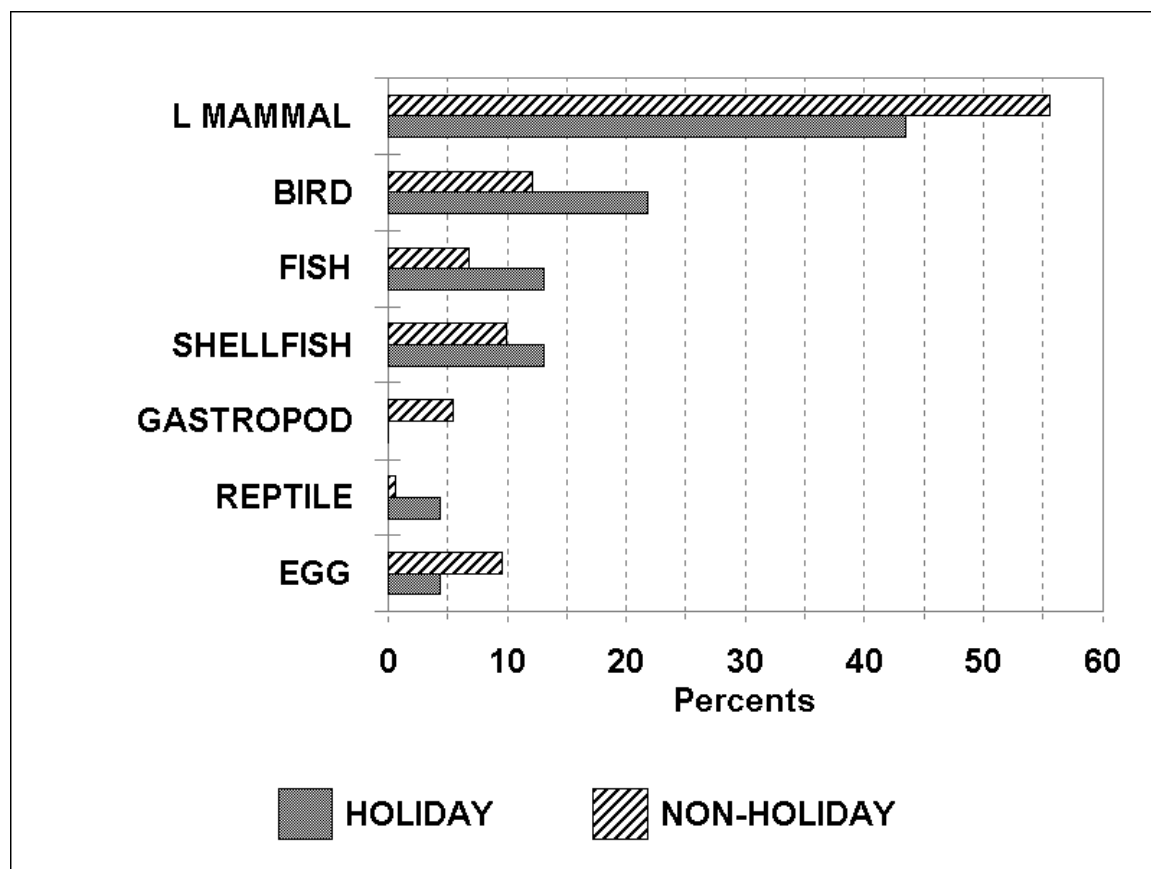


Figure 8. Comparison by class between holidays and non-holidays in *Imperial Cook Book*

In *The White House Cook Book*, similar analysis shows similar results. In 423 non-holiday meat dishes, beef was listed 95 times (22.5%) and veal another 29 (6.86%). Mutton was listed 31 times (7.33%) and lamb another 13 (3.07%). Pork occurred 17 times (4.02%), ham 16 (3.78%), bacon 3 times (.71%), and salt pork once (.24%). During holidays (52 meat dishes), beef occurred three times (5.77%). Veal, mutton, and pork did not appear. Lamb occurred four

times (7.7%) and ham one time (1.9%). These numbers show an overall decrease in the amount of red meat served at holidays.

Looking at all types of meat served by class, certain trends are noted (Figures 9 and 10). Based on percentages of meat dishes listed above, more large mammals are served during non-holiday times than during holidays. On holidays more fowl and shellfish are served. The difference seen in fish and game servings varied between books, some calling for more during holidays and some less. The amount of fowl served is consistently higher on holidays over non-holidays. This implies a placement for fowl above other foods. The use of shellfish is also higher on holidays except in *The Table* where the percentage of shellfish served does not change between holiday and non-holiday. Only in the *Imperial Cook Book* does pork appear in holiday menus and then it appears on only one day. This indicates a bias against pork as holiday fare. In other words pork is a lowly food.

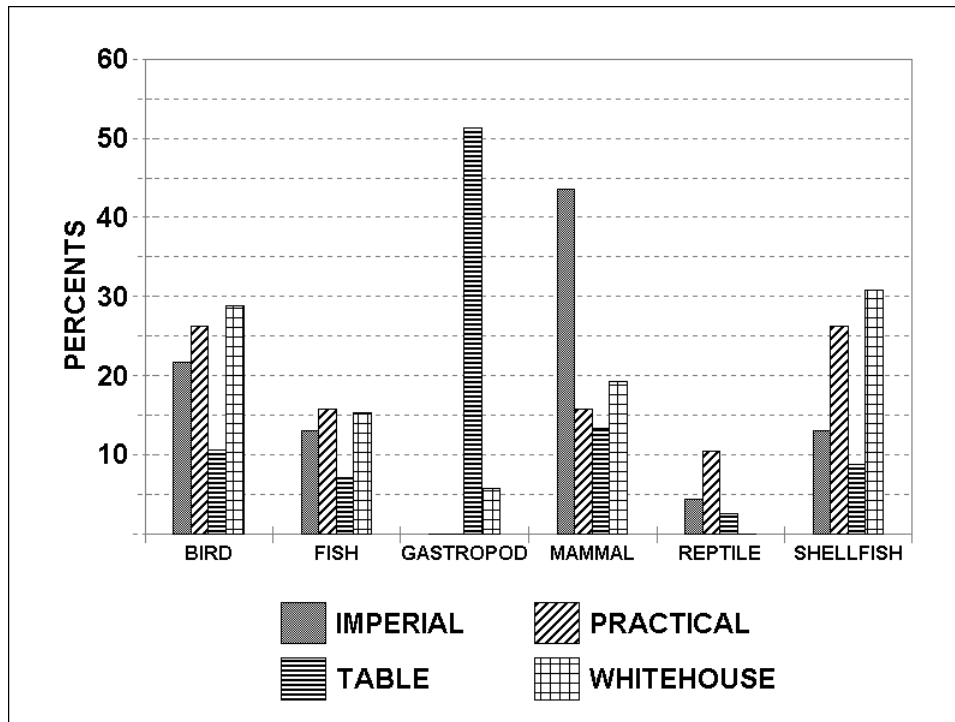


Figure 9. Comparison of class representation on holidays in the various menu sets

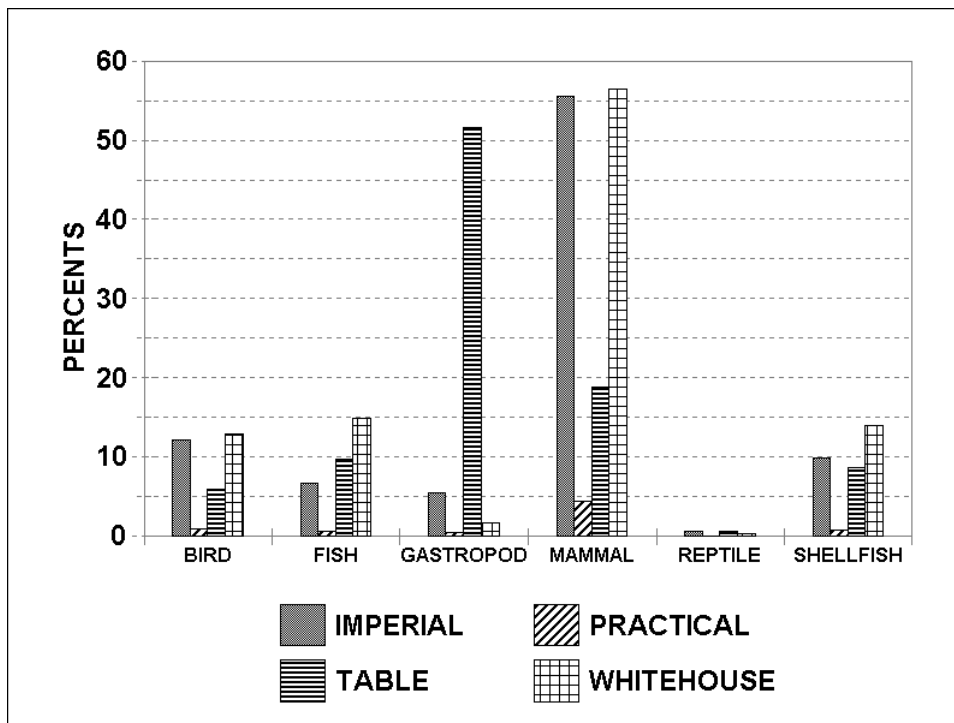


Figure 10. Comparison of class representation on non-holidays in the various menu sets

In those cookbooks believed to be indicative of middle class values and attitudes about meat (*Imperial Cook Book* and *Practical Housekeeping*), mammals were served over 60% of the time during non-holidays. The lowest incident of serving mammals was found in *The Table*, the highest status cookbook examined. Also, *The Table* calls for serving more shellfish, fish, and fowl on non-holidays than do the other books. The *Imperial Cook Book* and *Practical Housekeeping* call for the least servings of these.

On holidays, *Imperial Cook Book* calls for the most red meat, least fowl, fish, and shellfish of all the books. *The Table* calls for the most fowl. *Practical Housekeeping* includes more fish and reptiles (turtles) than the other books. *The White House Cook Book* provides more menus with shellfish and game.

From this information I interpret that fowl has a high social value. Shellfish also has high social value. Beef is common, or, rather, ordinary. Pork has low social value. Another aspect that seems to denote high social value is diversity. In *The Table* this is seen in foreign goods and game.

Days of the Week

One of the calendrical cycles identified in the cookbooks is days of the week. Because of differential treatment of Sunday meals, that is the presence of supper and the shifted placement of meals according to the clock, it is likely that variation in dishes is present. The near-holiday like treatment of Sunday meals suggests that Sunday meats would be more like holiday meats with the

same type of status markers present in the foods chosen. In comparing Sundays to other days of the week, holidays were not included.

Because of the emphasis of the four major domestic animals in all of the menus, these four will be compared with all other species grouped together into a group called “other”. For additional comparison, animal class representation will be examined.

The Table

By class, large mammals were listed more often than any other class of animal representing 28.63% of Sunday meals and 35.92% over the other days of the week (Figure 12). Birds were the second most commonly listed animals on Sundays with 22.37% representation. Fish were the second most common on non-sundays at 18.48% and third on Sundays at 15.16%. Shellfish was fourth on Sunday (15.01%) and third on other days (16.06%). Birds were fourth on non-sundays (14.2%).

Among large mammals, beef was the most commonly served meat representing 10.7% of Sunday dishes and 12.06% of non-Sunday meals . If veal is counted with beef, representations become 13.92% on Sunday and 17.22% on non-Sunday. Lamb and mutton combined account for 5.66% of Sunday dishes and 9.22% of non-Sunday items. Pig products, pork, ham, and bacon, account for 2.76% of Sunday items and 3.1% of non-Sunday dishes.

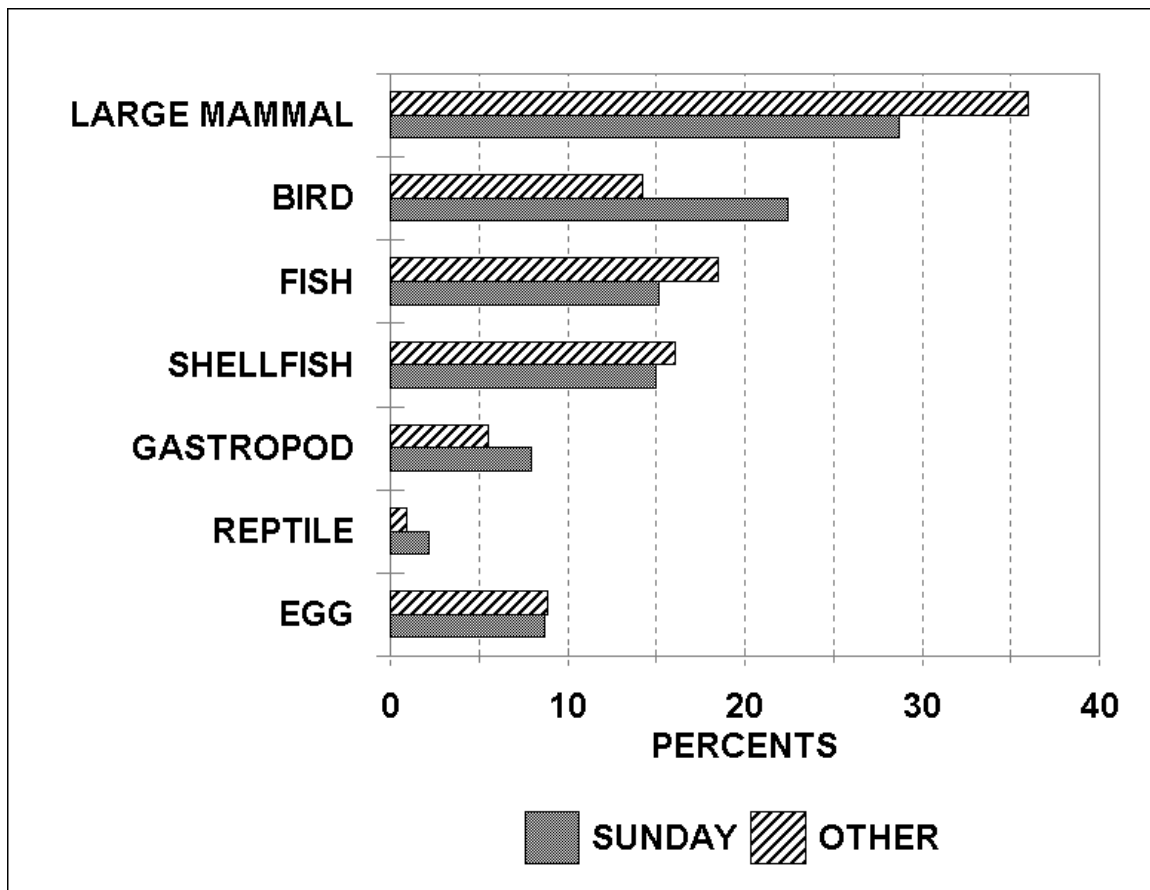


Figure 11. Comparison by class between Sunday meals and other meals in *The Table*

Chicken was far and away the most commonly listed bird. Chickens account for 10.26% of Sunday dishes and 6.12% of non-Sunday items. Turkey was the second most common fowl on representing 3.06% of meat dishes on Sunday and 1.36% on non-sundays. Nineteen other types of birds were listed during the course of the year. All were served on both Sundays and non-sundays, except reed bird, which did not appear in any Sunday menu.

When the percentage of each type of meat is calculated according to the days of the week, an impression is gained of which days a particular type of meat is most likely to be served (Figure 12). Pig products are most often served

on Sunday while chicken is served more often on Saturday. Cow is rather evenly spread across the days of the week.

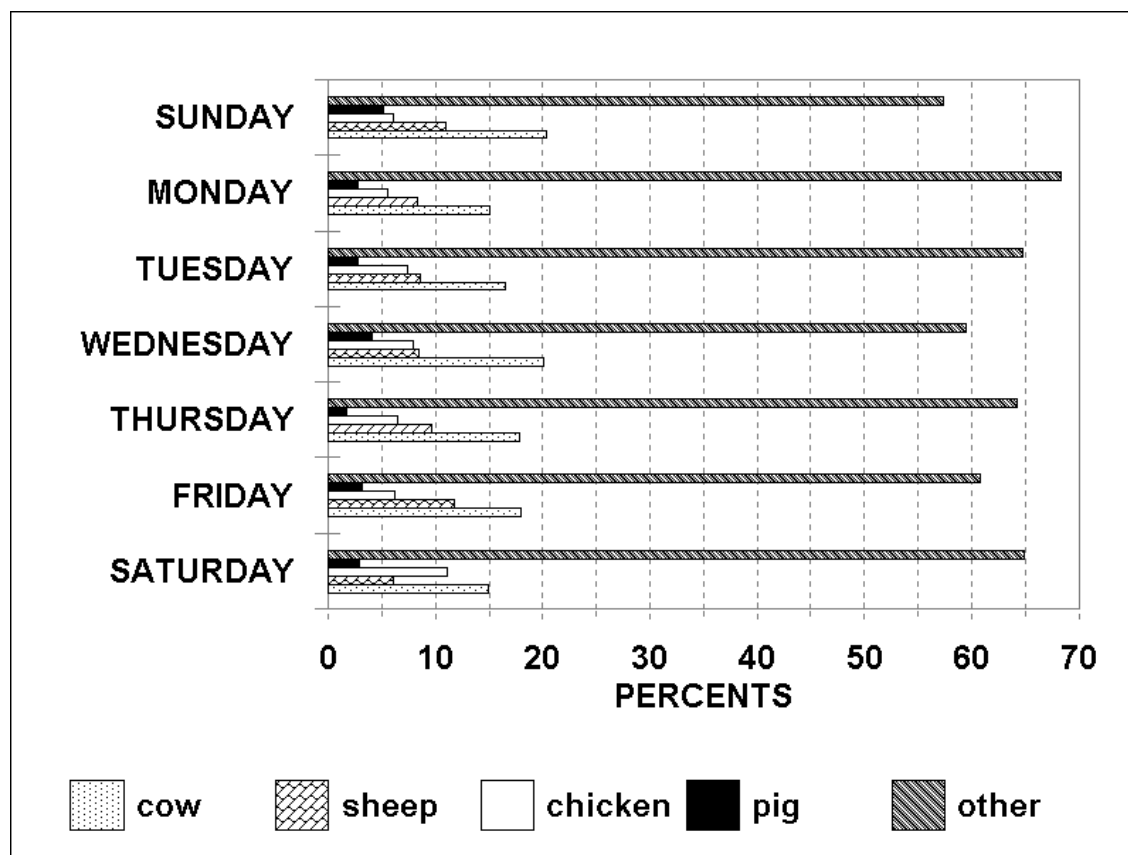


Figure 12. Percentage of different meats served on different days of the week in *The Table*

Viewed according to the percentages of different meats served on the different days another impression is obtained. It is clear that “other” animals make up a major portion of the meats in this cookbook. This clearly speaks to the diversity in these menus, potentially an identifier of higher status diet.

The White House Cook Book

In *The White House Cook Book*, large mammals account for 32.56% of the meat dishes on Sunday (Figure 13). On other days, large mammals are 45.52%

of the meat dishes. Fowl constitutes 17.44% of meat dishes on sundays and 9.43 on other days. Fish and shellfish are also better represented on Sundays than on other days.

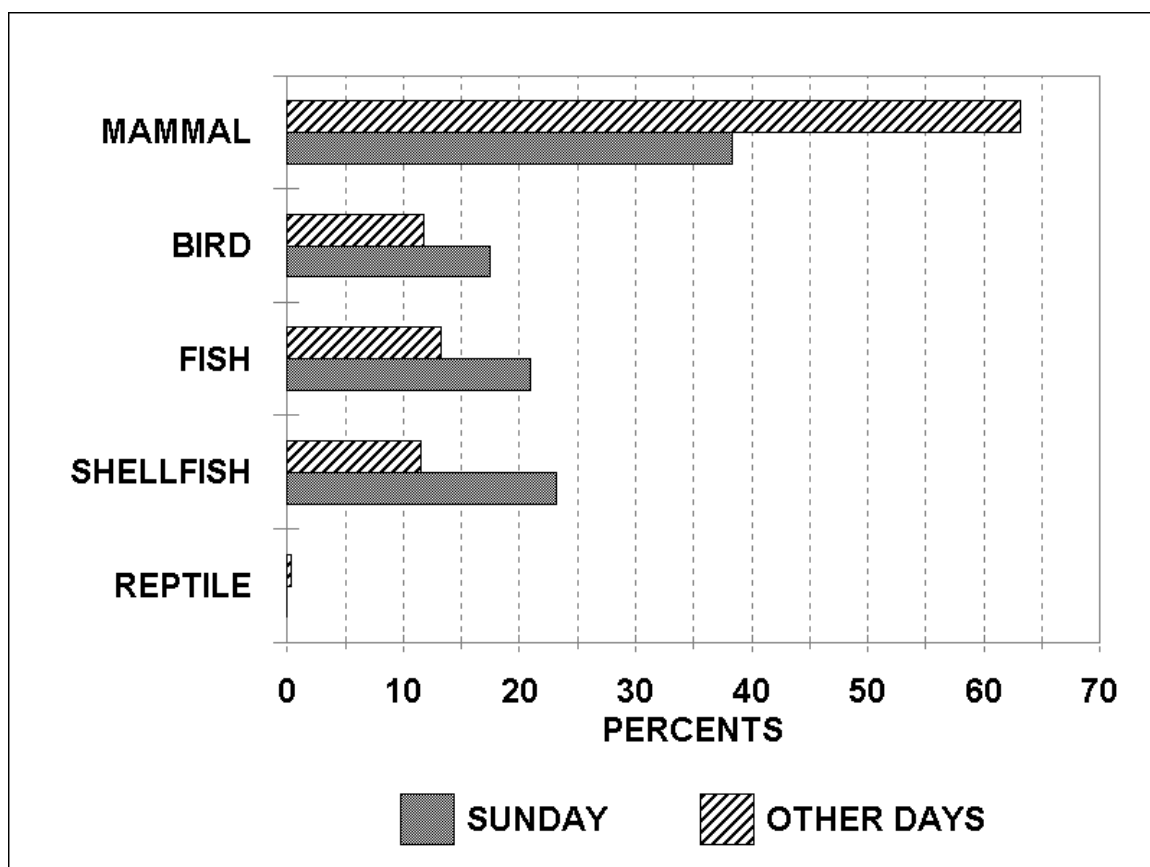


Figure 13. Classes of meat between Sunday and non-Sunday meals in *The White House Cook Book*

Beef drops in representation from 19.81% of the meat dishes on days other than Sunday to 12.79% on Sunday (Figure 14). With veal included, beef decreases from 25.71% to 17.44% on Sunday. Conversely, chicken increases from 6.84% to 11.63% on Sunday. Pork products make up 8.96% of non-Sunday meals and 8.14% of Sunday meat dishes. Mutton decreases from 6.6% to 3.49% on

Sunday. Duck, turkey, partridge, and goose have increased representation on Sunday over other days of the week.

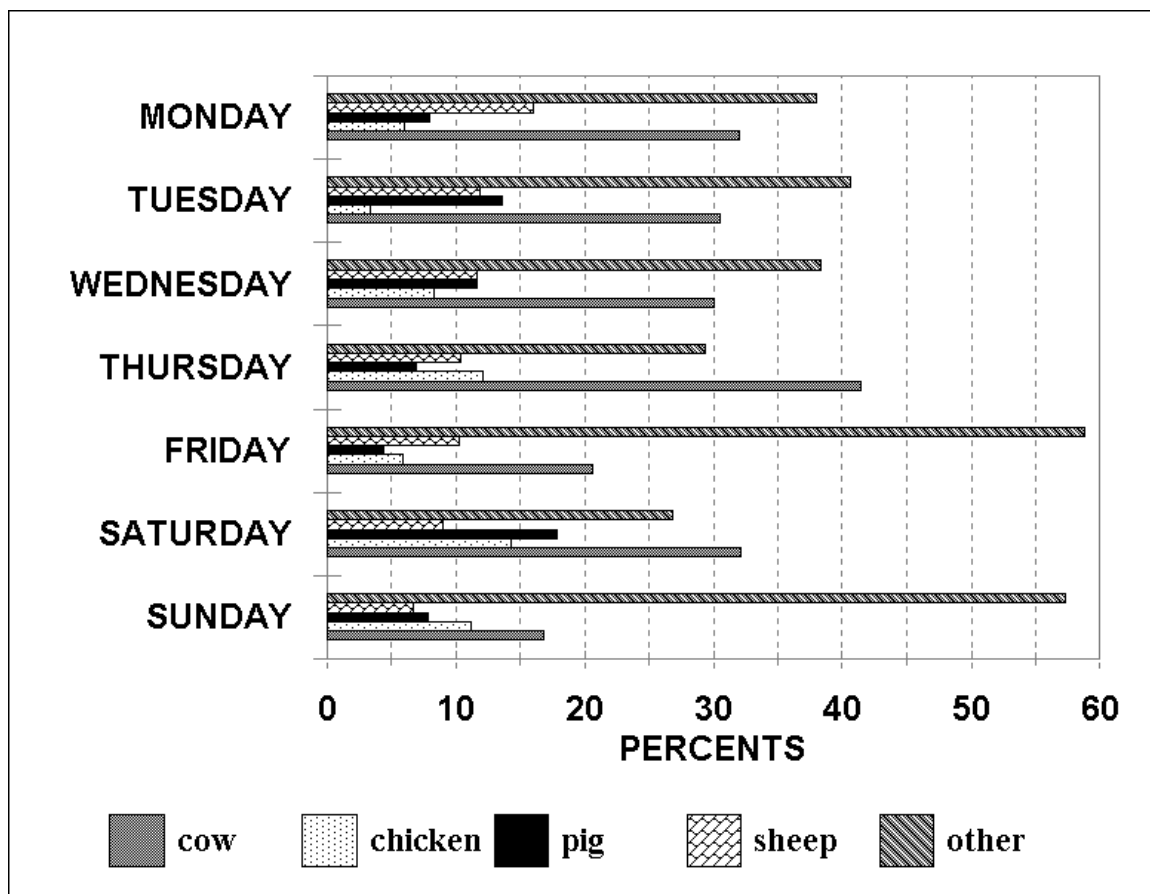


Figure 14. Representation of various meats across days of the week in *The White House Cook Book*

Imperial Cook Book

A similar shifting of representation occurs in the menus in the *Imperial Cook Book* (Figure 15). On Sunday large mammals were present in 33.65% of the dishes but on other days they were 59.85%. Birds contributed 9.85% to non-Sunday dishes and 24.49% on Sunday. Fish were not listed on Sunday, but make up 7.95% of non-Sunday dishes.

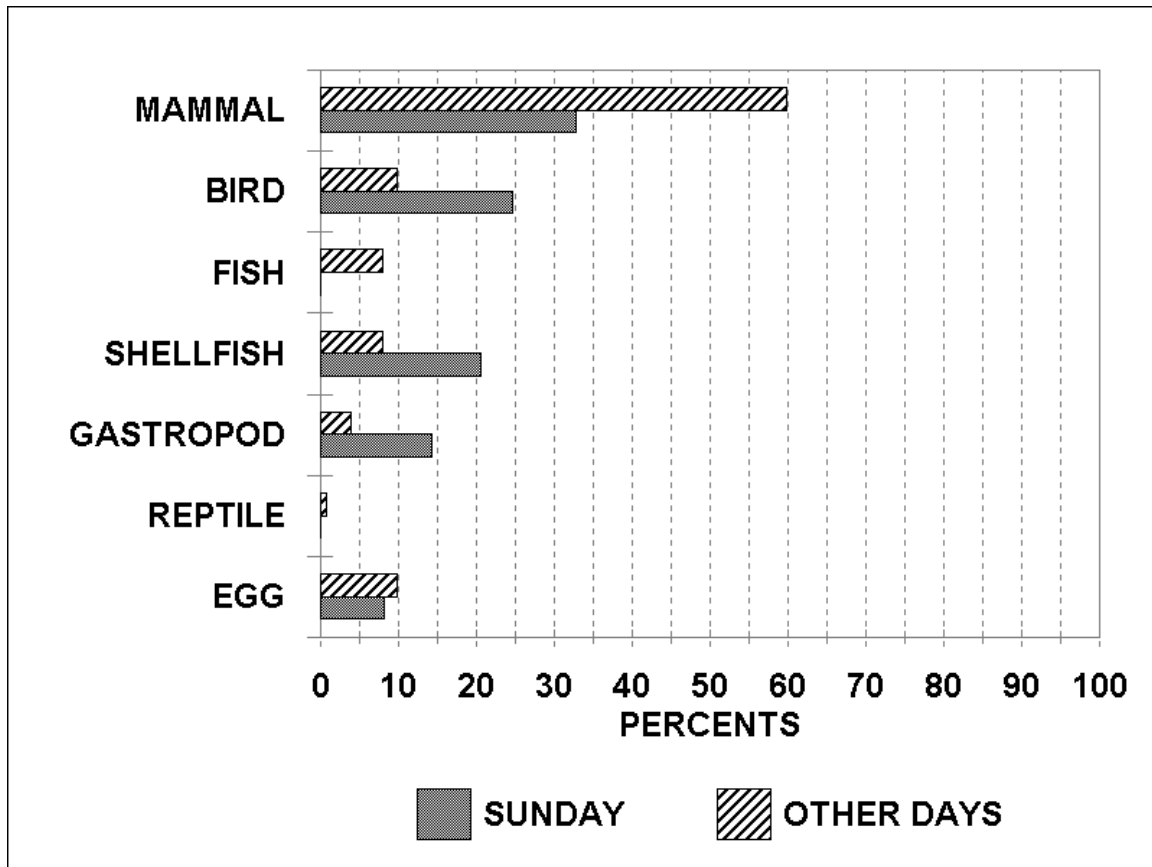


Figure 15. Class representation between Sunday and non Sunday meals in *Imperial Cook Book*

On Sunday, beef, including veal, comprised 6% of meat dishes (Figure 16). On non-Sundays, beef represents 18.46% of dishes. Lamb increased in percentage from .7% on non-Sunday to 12% on Sunday. The pork products ham and bacon make up 10% of Sunday meats and 13.95% on non-Sundays making it the second most commonly listed species on non-sundays.

Four species of birds were listed. Chicken was most common bird on Sundays and other days. On Sunday, chicken represents 16% of meat dishes. On non-Sundays chicken is 7.32%. Turkey and duck both represent 4% of Sunday meats. Goose was not listed on Sunday but represents .69% of non-

Sunday meats. Turkey represents 2.04% of non-Sunday meats and duck was not listed.

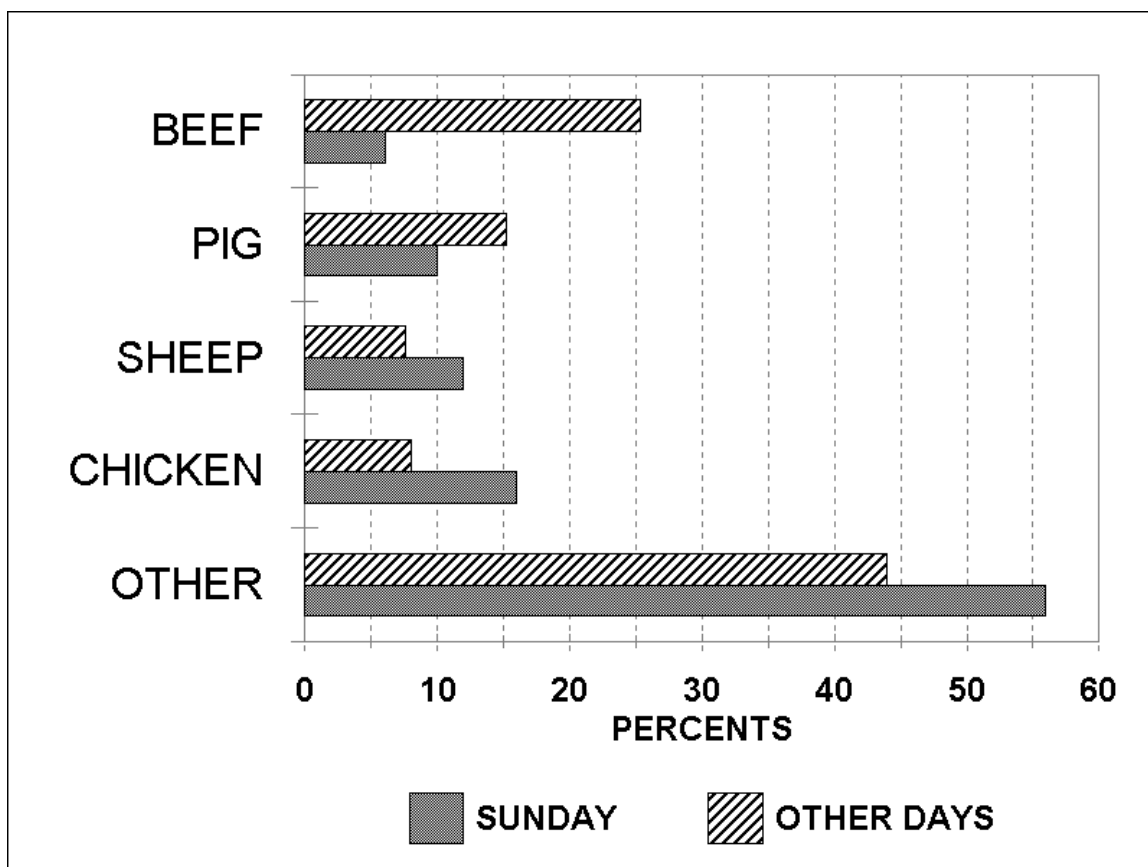


Figure 16. Representation of major meat types between Sunday and non Sunday meals in *Imperial Cook Book*

Practical Housekeeping

Like in the other menus, in *Practical Housekeeping*, beef was less commonly listed on Sundays than on other days of the week (Figure 17). Beef was present 27.74.% of the time on non-Sunday menus but only 16.% on Sunday. Chicken appeared as 20% of Sunday meats but only 8.16% of non-Sunday meats. Sheep, pig, and other meats were slightly more common on non Sunday menus.

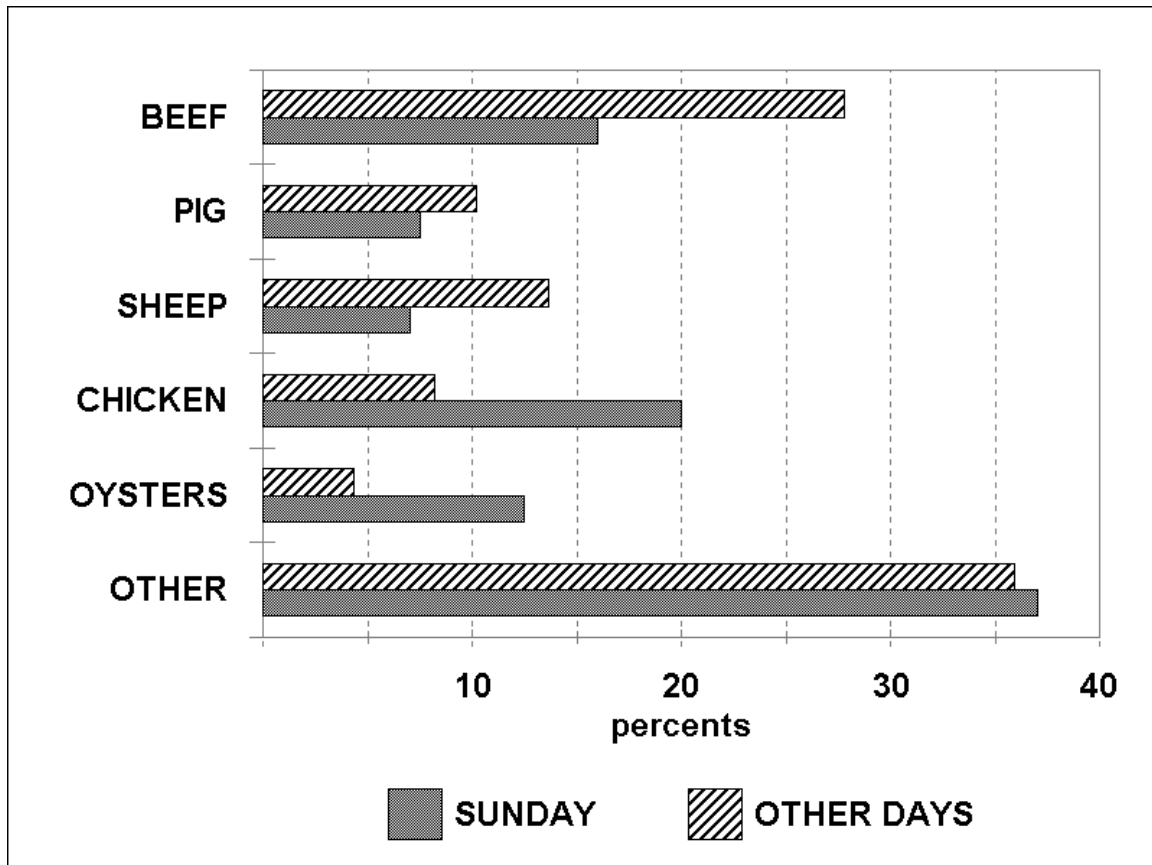


Figure 17. Representation of major meat types between Sunday and non-Sunday menus in *Practical Housekeeping*

By class, it is seen that mammals decrease in use from non-Sunday to Sunday meals. This is also true for fish. Conversely, birds, shellfish, and pelecypods increase in use on Sunday. This is the same as seen in the other menus.

Meals of the Day

Another calendrical cycle that may exhibit differential food serving is the meal of the day (Douglas 1975:251). The meals of the day, as presented in the

menus, were examined to see if there was variation along these lines. Holiday meals are not included in this analysis.

The Table

Meals listed in *The Table* include breakfast, lunch, and dinner. There appears to be no variation in these meal names by day as there is in *The White House Cook Book*.

Breakfast

Examining breakfast meats by class, it is seen that large mammals were most commonly served (37.54%). Eggs were nearly as frequent at 31.40%. As an independent food, eggs were the most commonly served dish at breakfast. Fish was served 23.18% of the time. Birds and shellfish were served less than 4% of the time and game and reptiles were served less than .4% of the time.

Of the large mammals, beef, including veal was most commonly served, comprising 12.99% of the breakfast meat dishes and 36.51% of large mammal dishes. Mutton and lamb combined were second most common with 9.68% of all meat dishes and 27.21% of large mammal dishes. Bacon, pork, and ham combined accounted for 6.62% of the meat dishes and 18.37% of large mammal dishes.. Other large mammal meat listed for breakfast included processed meats such as sausage, mortadella, and bologna. Tongue, kidney and tripe were also present.

A variety of fish were included in breakfast meals. Of the 32 different varieties, cod was the most commonly served. Cod comprised 7.62% of breakfast

meat dishes, making it the third most common breakfast food behind eggs and beef. The second most commonly served fish was smelts at 1.57%.

Birds comprised only 3.34% of breakfast meats. No game birds were served for breakfast, only domesticated varieties. Chicken was listed 24 times among the 1233 breakfast dishes(1.95%) and turkey was listed on another 14 occasions (1.14%).

Shellfish served for breakfast include oyster, soft crab, scallops, lobster, crab, shrimp, and crawfish. Lobster was most commonly listed, 64 times (5.19%). Oysters were second most commonly listed (13 times). Crabs, soft or hard, were served 14 times. Scallops were served seven times and lobster six. Shrimp were served three times and crawfish once.

Reptiles served for breakfast include frogs. These were listed twice. Venison, the only game served at breakfast, appeared four times.

Lunch

Like breakfast, the most commonly served class of meat was large mammal (37.93%). Shellfish was second most common at 26.87%, and fish third at 20.21%. The amount of meat dishes including bird increased to 10.58%. Eggs and reptiles each comprised less than 2% of the meat dishes. Game, including game birds, made up 1.29% of the meat dishes.

Of large mammals, beef, including veal, comprised 21.12% of all meat dishes and 57.05% of large mammal dishes. Sheep (mutton and lamb) comprised 28.84% of large mammal dishes and 10.68% of all meat dishes. Pork,

bacon, and ham made up only 2.66% of all meat dishes and 7.20% of large mammal dishes.

Lobster was the shellfish most commonly served at lunch (73 times). Soft and hard crabs combined were served on 55 occasions. Oysters were served 50 times. Scallops, clams, mussels, shrimp, soft clam, crawfish, and oyster crab were also served at lunch.

There were 32 different types of fish served at lunch. With 170 different fish dishes, the average number of times any one type of fish was served was five. Cod was listed 18 times. Anchovies and smelts were listed 14 times each and herring 13. Some species like, flounder, halibut, and salt cod, were only served once.

Birds served at lunch include both domestic and game. Chicken, turkey, squab, and duck were served for a total of 93 times. Chicken was the most commonly served with 59 occurrences. Turkey was a poor second with 15 servings. Game birds included grouse, quail, and redhead duck.

There were 16 occurrences of reptiles in the lunch menus. These include frog (12 times), and terrapin (4 times).

Dinner

Large mammals accounted for 37.31% of all meat dishes served for dinner (788 of 2226 servings). Shellfish was the second most common at 19.36%. Fish were well represented at 16.13%. Birds accounted for 15.77% of the meat dishes if game birds and domestic species are combined. Game, other than birds,

accounted for 2.3% of the dishes and eggs and reptiles accounted for less than 1.5% each.

Of large mammals beef and veal were most common at 16.79% of all meat dishes and 50.11% of large mammal dishes. Lamb and mutton accounted for 22.21% of large mammal dishes and 7.38% of all dinner meat dishes. Bacon, ham, and pork totaled 5.16% of large mammal meat dishes and 1.39% of all dinner meat dishes. The increase in pork/bacon/ham between lunch and dinner meals was in ham and fresh pork, bacon use decreased.

A variety of domestic and game birds were served during dinners. Chicken was second only to beef as the most common type of meat listed at dinner. Chicken accounted for 9.03% of all meat dishes. Turkey was the second most common bird listed (1.77% of all meat dishes). Squab was the third most commonly served bird at 1.34% of all meats. Duck, plover, partridge, grouse, woodcock, reed bird, quail, ptarmigan, goose, red head duck, doe bird, teal, canvas back duck, and rice bird together less than 4% to bird dishes.

Shellfish use at dinner declines percentage-wise from lunch. However, the use of oysters increased to 7.4% of all meat dishes and hard clam increased to 4.13%. The overall decrease is in the use of lobster, crab, scallops, shrimp, crawfish, soft clam, and oyster crab. There is also a slight increase in snails (escargot) with 2 servings (.05% of all meat dishes). The shifts from lunch and dinner in shellfish use are a result of fewer overall shellfish entrees and the increased use of oysters and clams as appetizers.

Numerous varieties of fish were served for dinner. None comprised more than 2.3% of meat dishes. Cod was most common, with sardines being second. Some species, such as pompano, were imported but most were locally available on a seasonal basis.

Besides game birds and fish, game and reptiles constitute the non-domesticated items of meat. Frog, venison, antelope, terrapin, green turtle, hare, and rabbit were served during dinners.

The White House Cook Book

There are four types of meals in *The White House Cook Book*: breakfast, lunch, dinner, and supper. Supper appears to be a late day meal served on holidays and Sundays. On these days lunch is omitted and dinner is apparently served during mid-day. The serving of supper only on special days implies that food served during supper will have some status beyond a normal meal like lunch.

Breakfast

Breakfast was a substantial meal, not the cereal and fruit light fare of modern day. While cereals were often included in the menus, these breakfasts could be confused with modern dinners. For example, one bill of fare, in August, lists fresh pears, cracked wheat, brain cutlets, meat omelet, lyonnaise potatoes, huckleberry griddle cakes, wheat bread, and coffee. Another bill from January includes raspberry jam, hominy, saratoga chips, porter house steak, french griddle cakes, brown bread, and coffee.

On non-holidays, mammals comprised 65.18% of all meats served for breakfast. Fish were second most common at 20.54%. Birds were served only 7.14% of the time and shellfish 5.36%. Game and reptiles were infrequently served (.89%).

Beef was the most common type of meat served for breakfast. Combined, beef and veal were listed 28.34% of the time. Pork products, including fresh pork, bacon, and ham were listed as 18.34% of the meat dishes. Mutton and lamb combined account for 9.17% of the meat dishes. Chicken comprised 5.83%, and oysters were listed 4.6% of the time.

Lunch

On an ordinary day, lunch was the mid-day meal. It was not a large meal when compared to dinner. Overall appearances from the menus indicates it was not as substantial as breakfast. An example of a lunch bill of fare from January includes cold corned beef, vegetable hash, deviled lobster, graham bread, peach butter, golden spice cake, and tea. An August example lists broiled salmon, sliced pressed lamb, tomatoes with mayonnaise, french bread, sponge cake, blackberries and cream, and iced tea. A number of the meat dishes in the lunch menus appear to be leftovers. What we call luncheon meats, like bologna and pressed meats, are present also.

Non-holiday lunch meat dishes included mammals 56.41% of the time. Birds were served more frequently for lunch than breakfast accounting for 15.38% of the meats. Shellfish was also more frequently served at 14.53%.

Fish, on the other hand, were not served as often as at breakfast, accounting for 11.97%. Game was infrequent (1.71%) and reptiles were not listed.

As at breakfast, beef was the most commonly served meat at lunch. Of the 115 meat dishes served at lunch, beef, including veal, was served 29.57% of the time. Second most common was chicken, representing 10.43% of the meat dishes. Mutton and lamb combined were represented as 10.44% of the meat dishes. Ham, pork, and bacon were represented as 8.7% of the meat dishes.

Dinner

The most substantial meal of the day was dinner. On an ordinary day, dinner was served in the evening. On holidays, dinner appears in the middle of the day instead of lunch. Supper is served in the evening on these days. Dinner was served in course with a definite pattern. Soup and fish are served as the first course (Gillette and Zieman 1890:549). Following these come the roast and relishes. The third course included vegetables and “made dishes”, then salad, crackers, cheese and olives and lastly dessert (Gillette and Zieman 1890:551). When served, raw shellfish come before soup.

Mammals constitute 52.33% of meat dishes at dinner. Shellfish were second most common with 16.28%. Birds consist of 15.12% of dinner meat dishes. Fish were served 13.95% of the time and game 2.33%.

Beef and chicken are the types of meat most commonly found in dinner menus. Beef, including veal, represents 26.57% of the meats. Mutton and lamb combined represent 12.56% of the meats. Chicken was third most common at

11.11%. Pork, bacon, and ham combined account for 3.86% of meat dishes. Oysters comprised 7.25% of dinner meats.

Supper

Supper was not served every day. On holidays and Sundays, dinner is moved to mid-day and supper is served in the evening. This is essentially a holiday meal but it is a small meal, more on the order of a lunch than dinner. A September example lists potted ham, oyster pie, rice omelet, cold slaw, french bread, cream cake, sliced peaches, and tea. A February example includes oyster pie, cold tongue, sliced cucumber pickle, orange shortcake, ginger snaps, and tea. Leftovers are sometimes seen in supper menus.

Because this meal appears only on Sundays and holidays in *The White House Cook Book*, only 34 meat dishes were present. For consistency, only non-holiday dinners are examined here.

Large mammals are the most commonly listed meats representing 45.83% of supper dishes. Shellfish is second most common, making up 33.33% of the dishes. Birds constitute 12.5% of the dishes and fish 8.33%.

Of mammals, ham and beef were most common, each at 8.82% of all supper meats. Pork and lamb both were listed 5.88% of the time. Veal and lamb were other mammal dish listed for supper.

Oysters were the most common meat dish representing 20.59% of supper meat dishes. Other shellfish served for supper include lobster, crabs, and clams.

Fowl served for supper include turkey and chicken, both comprising 8.82% of meat dishes. Goose was also listed as a supper meat.

Imperial Cook Book

Four different meals are listed in the *Imperial Cook Book*. These include breakfast, dinner, supper, and lunch. Breakfast is the morning meal. Dinner is the largest meal and is listed second in the menus. Supper is listed last during days of the week. On Sundays lunch is listed. It comes last in the listing but it is believed that it was served mid-day. Thus, on ordinary days, dinner, the big meal, was served mid-day with a light supper in the evening. On Sundays, lunch was served mid-day and the big meal, dinner, was served in the evening.

Breakfast

Eggs were listed more often than any other breakfast dish (19.81%). Beef was the second most commonly listed meat at breakfast (12.26%). Ham and mutton were tied for third at 7.55%. Chicken contributed 6.6%. Oysters, bacon, pork, and veal each comprised 5.66% of the meat dishes and liver 4.72%. Other meat dishes served at breakfast include cod, sausage, hash, mackerel, prairie chicken, frog, rabbit, kidney, sweetbread, lamb, and venison.

Lunch

Lunch was infrequently listed as a meal. Only 12 meat dishes from lunches were recorded. Ham was the most common of these dishes, comprising

a full 25%. Oysters and duck each accounted for 16.67% of the meat dishes. Venison, lamb, turkey, chicken, and goose each comprise 8.3% of the dishes.

Dinner

Of the 123 dinner meat dishes, beef was served 16.67% of the time. This was followed by chicken (12.28%). Various types of fish comprise 11.4% of the meats and oysters 9.65%. Mutton was served as 7.3% of the dishes and veal and ham each comprised 4.9%. Other meat dishes served at dinner include turkey, pork, lamb, prairie chicken, venison, clam, lobster, pigeon, tongue, duck, turtle, goose, hear, bacon, and quail.

Supper

There were 83 meat dishes served as supper meals. Many of these were packaged or prepared products, like bologna and pressed chicken. It is uncertain if tongue was purchased prepared or cooked to be served for light fare.

Beef was the most prevalent meat served comprising 25.61% of the meat dishes. Tongue was served frequently comprising 13.41% of the meat dishes. Ham and chicken were each listed 9.9% of the time. Egg dishes occurred 7.32%.

Other meat dishes include salmon, pork, mutton, oyster, lobster, sardines, lamb, turkey, bacon, goose, shrimp, preserved beef (pressed, dried, soured, and corned), pressed chicken, herring, and bologna.

Practical Housekeeping

Three different meals are presented in *Practical Housekeeping*: breakfast, dinner, and supper. Breakfast is the morning meal. Dinner, the largest meal

of the day, is served mid-day. Supper is a light meal served in the evening. On Sunday, dinner may be served around 3 p.m. and supper not served at all (Buckeye Publishing 1890:379). This two-meal pattern is also mentioned as appropriate in the winter, when days are short.

Breakfast

For breakfast, 62.44% of the meat dishes are from large domesticated mammals. Fish constitute another 8.52%. Birds account for 5.99% of the dishes and shellfish 4.61%. Game is infrequent.

The most common dish listed for breakfast is eggs occurring 17.97% of the time. Beef and veal together account for 22.8% of all meat. Ham and bacon together constitute 15.66% of the meat dishes. Mutton and lamb account for 12.21% . Chicken was served 4.14% of the time. Other meat dishes served for breakfast include liver, sausage, has, turkey, tripe, kidney, lamb, venison, clam, duck, prairie chicken, rabbit, and goose and various types of fish.

Dinner

By class, large mammals constitute 54.65% of dinner meat dishes. Birds account for 21.39% of the meats listed. Fish was listed 10.7% and shellfish another 9.53%. Game was listed only 2.8% and eggs even less at .93%.

If the recipes in *Practical Housekeeping* were followed, there was a 22.79% chance that beef would be served for dinner. This is more than any other meat type. The second most prevalent meat served for dinner was chicken (13.72%). This was followed by fish at 11.5%, mutton at 8.7%, and oysters at 4.3%. Ham

was listed as 5.17% of the dinner meat dishes and veal and turkey both were listed 4.2%. Other meat dishes served at dinner include duck, lamb, tongue, bacon, pork, heart, clam, lobster, goose, prairie chicken, venison, rabbit, quail, pigeon, turtle, pheasant, squab, liver, and crabs.

Supper

Supper was a small meal that often contained leftovers. Packaged meats, what we would today consider luncheon meats, were served regularly. Tongue appears to be served in this way, without appearing in other meals. Either tongue was cooked just for supper or it was purchased pre-cooked.

The most commonly served meat for supper was beef (19.8%). Chicken was second most common at 9.7% and tongue was third, being 9.1% of the supper meat dishes. Ham and dried beef each account for 8.5% of the meat dishes and mutton another 7.9%. Bologna was served 4.9% of the time, as was dried beef. Other meat dishes include veal, turkey, sardines, oysters, duck, lamb salmon, goose, heart, cod, bacon, venison, herring, frog, halibut, chipped beef, and veal loaf.

Interpretation

Interesting trends are apparent in the comparison of breakfast, lunch, and dinner meats. Dinner includes a greater number of different types of meat. Dinner also includes a greater number of meat dishes in the simple total number of servings. Large mammals consistently form the greatest number of meat dishes. Fowl is more commonly served at dinner than at breakfast, as is

shellfish. Fish, while fairly constant in their representation do decrease in use from breakfast to dinner.

Species Variability

The ability to add various types of meat to the table is generally associated with wealth (Douglas 1984:22). This notion can be examined through these menus, since the books can be ranked in their origins, pretensions, and intended audiences. *The Table*, being the grandest of the books, should provide the most varied menus. *The White House Cook Book* is viewed as a close second. Following this is the *Imperial Cook Book*, followed by *Practical Housekeeping*, the most modest of the books.

The Table lists 4,298 meat dishes over a span of 1,095 meals. There are 295 different meat types presented during these meals. Each type of meat is served in 3.71 meals per year on average. In *The White House Cook Book* there are 498 meat dishes listed over 267 meals. A total of 58 different types of meat are listed in an average of 18.8 meals per year. *Imperial Cook Book* lists 339 different meat dishes for the same 267 meals. With 46 different types of meat, this averages to 23.8 meals per meat type. In *Practical Housekeeping*, there are 1251 meat dishes over 1095 meals. There are 48 different types of meat giving an average of 22.8 meals per meat.

It would seem there is some correlation between status and faunal diversity. However, by examining the numbers of different types of meat served

at each meal, in relation to the number of meat dishes, a correlation is found. Of 90 breakfast meat dishes, 23 different types of meat were served. For lunch, nine types of meat were served in 12 dishes. Of the 123 dinner meat dishes, there were 32 different meats and at supper there were 25 different meats served in 81 dishes. Pearsons R analysis indicates the more meat dishes served, the more different types of meat will be served (correlation coefficient of .99256). This statistic can be used to argue against any differential social value in the variety of meats served. As in the analysis of archaeological faunal assemblages, the greater the sample size, the greater the variety of species that will be found (Grayson 1984).

In spite of, or possibly because of, the correlation between sample size and numbers of species, the difference between *The Table* and *Practical Housekeeping* appears to be one of wealth. Both present an equal number of meals. The higher wealth of *The Table* is seen in the greater number of dishes served at each meal, beyond that seen in *Practical Housekeeping*. Agreeing with Grayson's identification of a correlation between greater numbers of bones and greater numbers of species, the interpretation can be made that the more meat dishes contained within a set of meals the greater the species variation will be.

An issue related to species variability is complexity. Mary Douglas identifies complexity as an indicator of status at meals (Douglas 1982). However, complexity involves recombinations of different elements within meals. If the numbers of meals represented by archaeological assemblages could

be determined, then a relatively greater variation of species between assemblages could be interpreted as an indicator of greater relative wealth. It is not possible through archaeology to determine how many meals are represented in an assemblage.

Conclusion

Using the results of analysis of meats on holidays and special occasions to point to socially preferred meats, the analysis of meats during meals of the day shows that dinner is more socially important. A ranking of meals can be made with dinner at the top, breakfast at the bottom. Meats served during these different meals are served accordingly. When examined by class the following observations are made. Fowl is most often served at dinner. Beef is served any time. Fish is most often served at breakfast, as are internal organs such as tripe and kidneys.

The interpretation of a greater status for dinner might seem obvious to some. After all, books have been written on dinner and dining. Attention has been paid to the manners required for dining but such work for breakfast and lunch has not been done. The differential attention paid to dinner over the other meals makes manifest a knowledge of differential status of dinner.

From the menu analysis, an understanding of what foods were appropriate for holiday dinners and feasts and how these meals varied from other meals is ascertained. Fowl was more for holidays and dinners than for ordinary meals. Beef was commonly found throughout the meal cycle but less

on holidays and then as poor cuts in special foods, like soup. Pork was more commonly served for breakfast and infrequent in holiday dinners.

These conclusions do not stand alone. The cookbooks, as well as other documentary sources, can be drawn upon to provide additional data for this study. Information on butcher cuts, including their prices and relative value, provides additional data for this study. Some dietary studies and general price lists provide support for the interpretations from the menu studies.

CHAPTER 7: BEYOND MENUS: ASSOCIATED STUDIES

Menus in cookbooks are not the only type of text that can provide information relevant to the analysis of late 19th century faunal remains. The types of information that are of value here include dietary studies from New York City, meat price lists, and butchering charts.

Some Dietary Studies in New York City

From 1895 to 1897 Dr. Isabelle Delaney conducted in-house studies of families in New York City to analyze the household diets (Atwater and Woods 1898; Atwater and Bryant 1899). These studies lasted for about 10 days in each household and recorded the amounts and types of food each family consumed. The reports provide interesting information about various aspects of people living in some of the poorer neighborhoods of New York City. Information presented in the studies includes ethnicity, family composition with sex, age and weight, income, and expenses. The purpose of these studies was to determine what people were eating and how their lives could be improved by changing their diets.

Dr. Wilbur Atwater, the instigator of these studies, was a professor of chemistry at Wesleyan University. Atwater's work focused on food and nutrition. He was one of the premier nutritionists at the turn of the century. Throughout Atwater's work, his goal is to enlighten on how to acquire the most nutrition from the least amount of cost (Atwater 1895:361). These studies were

designed to provide Atwater with raw data with which he could evaluate the eating habits of urban poor.

Towards this end, all food items brought into the homes during the study period were weighed and the prices listed (Appendix III). Food values of these items were then calculated and compared to what was considered a more optimum diet, thereby suggesting changes that could improve health and reduce costs.

The data presented in these dietary studies indicates an ethnically diverse city population. Of the households examined, 11% were of mixed ethnic heritage, that is, husband and wife were from different countries. While the food samples are small, these studies can be used to compare diets of ethnically disparate people within New York City for variation. Also, because the basic income levels of the households are presented, the diets can be compared along economic lines.

Comparing meats between houses of single ethnicity, a clear across-the-board preference for beef is seen. By weight, beef represents from 37% (German) to 48.8% (Irish) of the meat consumed. Pork was the second most common meat representing from 21.8% to 32.6%. Mutton and lamb combined account for 6% or less of the meat except among Americans where it represented 18.55%. Chicken represented 20.5% of the meat for English, but 10.6% for Germans, 9.23% for Irish and 5.5% for Americans. Germans and Americans ate fish more frequently than English or Irish.

Examined again, according to income, there appears to be little correlation between weekly income and the types of foods consumed. The weekly incomes represented are all low. There also appears to be a limited number of species present. This lack of variety may be associated with overall lower status individuals used in the study.

The cuts of beef were examined for all households. Since the amounts in weight, the number of meals, and the cost were presented in the studies, the cost per pound of the various cuts could be calculated (Figure 10). Cost per pound of the various cuts ranged from 17.5 cents per pound for canned corned beef to 3.09 cents per pound for heart. The average was 8.55 cents per pound.

Overall, the most common cut was round steak. This was a relatively expensive cut with an average price of 11.28 cents per pound. Of the four most popular cuts, round steak, chuck steak, sirloin steak, and foreshank, only foreshank cost less than the overall average price per pound of beef. Unspecified corned beef made up the fifth most common meat type. The five cuts that comprise the most common 50% of beef have a combined average cost per pound of 9.75 cents.

The conclusion that these lower status individuals consumed a greater proportion of better quality meat is important for archaeological studies. An assemblage high in steaks and roasts is generally considered indicative of middle class status. It would seem then, that interpreting a site as middle or

upper status based on a faunal assemblage with a good representation of better steaks and roasts could misinterpret what is really a low status site.

An analysis of the favored cuts from pig show a similar pattern. The three cuts that make up almost 45% of the pork cuts have a combined average price per pound of 12 cents. Overall, the price of pork cuts is 8.9 cents per pound. Other cuts of meat over 10 cents per pound include frankfurters, headcheese, shoulders, trimmings, and smoked ham. The three favorite cuts were bacon, chops, and ham.

If we look at meats by animal class, large mammal is clearly the most common. Large mammals make up over 83% of meat dishes. These large mammals are cow, pig, and sheep. Birds made up only 1.4% of the meals and included only chicken. Fish comprised 15% of the meats.

Of the large mammals, cow was the most popular comprising 55% of the meals containing large mammal. Pig comprised another 34.6%. Sheep made up the remaining 10.4%. *The Table*, *The White House Cook Book*, and *Practical Housekeeping* all showed a higher percentage of sheep than pork. *The Imperial Cook Book*, the lowest status cookbook, showed a slightly larger percentage of pork than sheep. Considering the status of the people examined by Delaney, it would seem that the higher percentage of pig may be related to lower social status.

BEEF		VEAL	
NECK	0.08	BREAST	0.09
CHUCK	0.10	CHOPPED ROUND	0.12
CHUCK STEAK	0.10	LOIN	0.08
FORE SHANK	0.06	LEG	0.10
HIND SHANK	0.05	SHOULDER	0.08
SOUP PIECE	0.08	CHOPS	0.14
STEW PIECE	0.08	CUTLETS	0.10
CORNE D FLANK	0.08	HEAD CHEESE	0.07
CORNE D, UNSPECIFIED	0.08		
CORNE D SHOULDER	0.09	FISH	
CORNE D PLATE	0.06	COD, SALT	0.07
CORNE D RIB	0.08	COD, BONELESS	0.07
CORNE D, CANNED	0.18	COD	0.06
CORNE D RUMP	0.10	MACKEREL, FRESH	0.05
CORNE D BRISKET	0.06	MACKEREL, SALT	0.11
ROAST ROUND	0.11	SALMON	0.10
ROUND	0.14	SALMON, CANNED	0.21
ROUND STEAK	0.11	SARDINES, CANNED	0.25
STEAK SKIRT	0.07	SARDINES	0.06
SIRLOIN STEAK	0.14	SMELTS	0.09
FLANK	0.07	BLUEFISH	0.07
SHOULDER	0.10	STURGEON	0.01
STEAK	0.13	HERRING, FRESH	0.05
		SHAD, FRESH	0.10
PORK		PIKE, FRESH	0.06
HAM, CORNE D	0.08	YELLOW PERCH	0.08
HAM	0.15	HALIBUT, FRESH	0.10
HAM, SMOKED	0.14	WHITE	0.12
SPARE RIB ROAST	0.08	FLOUNDER	0.05
SPARE RIB NECK	0.04	WEAKFISH	0.05
HEAD	0.05		
CHOPS	0.11	EGGS	
SHOULDER	0.10	CHICKEN	
SHOULDER, CORNE D	0.08		
SHOULDER SMOKE	0.08	MUTTON	
SHOULDER, SALT	0.07	SHOULDER	0.18
BACON	0.11	BREAST	0.10
LOIN	0.10	LEG	0.11
FEET	0.06	CHOPS	0.14
FEET, PICKLED	0.05	NECK	0.05
FRESH	0.07	SIDE	0.13
		LAMB	
		CHOPS	0.09
		LEG	0.08

Table 10. Meat prices (cents per pound) abstracted from Atwater and Bryant 1898.

New York Markets and Meat Prices

An examination of the late 19th century urban markets must be done in relation to the changes occurring in the meat industry at a national level. Meat, fowl, and game were all imported from beyond the city limits. Items came from ever increasing distances as transportation and refrigeration improved. Bananas and oranges were rare luxury items before the 1880s (Nasaw 1995:87). More and more vegetables, fruits, and some meat products, were being packaged in cans (Nasaw 1995:87; Goody 1997).

Prior to the Civil War, animals to be sold for meat were herded to markets. Butchers would buy live animals, slaughter and section them for sale. By the end of the century, butchers had become more retail sellers of meat with the slaughtering and wholesale cutting of animals being done at packing houses. Trains and refrigeration were instrumental in this change.

New transportation technologies, most notably trains (but also including canals and steam boats) and especially refrigerated trains, allowed foods to travel farther faster and be stored longer. It became possible in New York City to purchase foreign goods, such as bananas from South America, and beef from Texas. These technologies had dramatic impacts on foodways not only in New York City but across the country and around the world.

Canning had a major impact on the food industry, especially fruits and vegetables. The process of putting food in cans was developed in the early part of the 19th century in Europe. In 1819, William Underwood moved from

England to Boston and began packing fruit, at first in glass (Goody 1997:342). By 1842, Underwood was using tin cans (Heite 1990:17). Whale oil was put in tins in New England but this trade decreased through competition with petroleum (Heite 1990:44). Cannery moved south and applied their skills to fruits and vegetables (Heite 1990:44). In the Report of the United States Secretary of Agriculture for 1893, tomatoes, corn, and salmon are listed as the three most valuable canned products (Secretary of Agriculture 1894:535).

Libby, McNeill, and Libby formed in 1868 to pack meat. Their first product was canned corned beef introduced in 1874. Libby also had interests in vegetable and fruit canning and owned canning operations in the Middle Atlantic (Heite 1990:44). Canning did not have a major impact on red meat marketing. It was more important in vegetables and seafood. Lobsters were one of the first foods packaged soon followed by tomatoes.

Canning provided a means of packaging and shipping a wider variety of products than previous. Oysters, lobster, and vegetables could be canned in the East and shipped to the Midwest and stored for extended periods of time. Thus cooks in Chicago could consider dishes like lobster bisque and oysters. The more significant changes to the marketing of meat are related to trains and refrigeration.

The first live cattle market in New York City was established in 1656 (DeVoe 1969 [1862]:38). The market was supplied by animals that were raised locally. Farmers or drovers would bring in their herds, sometimes pasturing

them near town to re-fatten them after a long walk. Butchers would buy animals for their shops. Butchers did their own slaughtering of animals, division of the carcass and sale of the meat. In this fashion, entire animals reached city vendors. Heads, feet, and all other parts could be purchased by city residents.

As the urban centers of the East Coast developed during the late 18th and early 19th centuries health issues forced meat production out of downtown areas. It also became necessary for production to occupy more land forcing long distance importation of meat into the cities. By the early 1800s, it was profitable for Ohio farmers to herd cattle to Eastern cities (Vaughn 1915).

Prior to 1850, most animals arrived at market on foot. In 1805, George Renick herded 68 cattle from the Scioto Valley of Ohio to Baltimore (Vaughn 1915:58). George's brother, Felix, drove 100 head to Philadelphia and, in 1841, R. Seymour drove 840 head from Ohio to Philadelphia (Vaughn 1915:59). The route from Kentucky to New York City was about 800 miles and took almost three months to complete. Vaughn (1915:59) notes a drive from Texas to New York City that took over four months. The first reported drove of cattle from Ohio to New York City was in 1817. A drover began with 200 head of cattle at Chillicothe, Ohio and reached New York City with about 100, having sold many on the way (DeVoe1969 [1862]:411). The cost of beef in New York City was high enough to make such droves profitable (DeVoe1969 [1862]:411).

Canals, like the Chesapeake and Ohio Canal and the Erie Canal, were built to facilitate transportation of farm products from the nation's interior and market items to the interior. The Erie Canal, which opened in 1825, connected the Great Lakes to the Hudson and New York City. The canal played a major role in the development of New York City as a port. In 1848, meat shipments along the Erie Canal included 87,930 barrels of pork, 8,182,000 pounds of bacon, and 60,570 cattle (Commissioner of Patents 1850:541). The importance of the canal was greatly diminished by the railroads after the Civil War.

The first reported use of trains in shipping animals was in 1852 (Dowell and Bjorka 1941:224). Cattle from Lexington, Kentucky, were sent to New York City. The trip included droving, boat transportation, and on the stretch between Cincinnati and Cleveland, rail shipment. In 1853, Seymore Renick shipped cattle to New York City from Ohio. Since the cattle had been purchased in Texas, this is the first known shipment of cattle from Texas to New York (Beiber 1985:40).

Railroads expanded to the west after the Civil War and the great cattle trails developed. Large herds of cattle were raised in Texas, but with the rail connections to the Eastern markets in Kansas, cattle had to be driven to rail terminals like Abilene. Price wars between the railway companies caused shipping rates to drop during the 1870s. In 1876, a carload of cattle could be shipped from Chicago to New York for one dollar (Nevins 1927:400), about the cost of a banana (Nasaw 1995:87). By the 1890s, railroads had extended

themselves to more areas. This, coupled with closing of the range by settlement, ended the age of cattle droving (Hinman and Harris 1942:35).

Westward expansion was one of the major developments of the late 19th century. In 1866, Texas had almost 2.5 million cattle but with no easy way to market them. The average price for these animals was just over \$5.59 a head. Most of the beef cattle raised in the United States were in the mid-west. Illinois produced the most cattle with 922,874, with an average price of \$23.48. Ohio had 718,546, Iowa 599,227, Missouri 496,676, Indiana 489,789. New York and Pennsylvania also raised significant numbers, with 740,940 and 693,351 respectively (Commissioner of Agriculture 1867:68). For the year 1866, there were 298,882 beef cows received in New York. In 1866, there were 1,036,621 sheep received in New York at prices between six and eight cents per pound. For the same period, there were 666,392 hogs at prices between six and thirteen cents per pound (Commissioner of Agriculture 1867:96).

By 1876, beef cattle in Texas numbered 3,458,300 and cost on average \$10.39. Illinois had the second most cattle at 1,274,100, at an average cost of \$21.97. Iowa, Missouri, and California also had over one million cattle each. Ohio and Indiana raised almost 800,000 cattle each, while New York and Pennsylvania were below 700,000 each (Commissioner of Agriculture 1877).

In 1894, Texas raised over 6.5 million cattle. Iowa raised almost three million. Illinois, Iowa, Nebraska, Montana, and New Mexico each raised over one million. The trend, therefore, was for cattle raising to be further west

through time. Trains made this possible. As urban centers developed more control over markets (Wiebe 1967:14), new agricultural technology and transportation re-shaped farming. In the West, large farms developed eclipsing the capacity of Southern farms (Wiebe 1967). Refrigerated trains altered the way meat was sent to the city.

New York City received 293,101 live beef cattle in 1868. In 1877 a total of 505,217 cattle were received (Commissioner of Agriculture 1877:218). In 1898, only 51,279 live beef cattle were received in New York City (Unites States Department of Agriculture 1898:574). Rather than live animals, New York City was receiving the bulk of its beef in processed form from Kansas and Chicago.

Trends in live sheep and hogs shipped to New York City are similar to those for beef. Over 1.4 million sheep were shipped to New York City in 1868. In 1876, just over 1.2 million were shipped (Commissioner of Agriculture 1877:218) but by 1898, only 659,606 were shipped (Unites States Department of Agriculture 1898:574). In 1868, just under one million live hogs were shipped to New York city. In 1873, a high of nearly two million were shipped (Commissioner of Agriculture 1877:218). By 1898, only 661,195 live hogs were shipped (Unites States Department of Agriculture 1898:574). For comparison, in 1848 meat shipments along the Erie Canal included 87,930 barrels of pork, 8,182,000 pounds of bacon, and 60,570 cattle (Commissioner of Patents 1850:541).

New York City Markets

New York City markets were diverse. Through the last half of the 19th century, the port became increasingly active in both the export and import of foods. Price lists from the Washington Market, references in *The Table*, and *The Market Book*, speak to the diversity of foods available. Venison as well as hares, and a variety of wild fowl are listed in the Washington Market price lists. *The Table* includes recipes that include soft shell crabs in January when they are not locally available. The first public market, in what is now New York City, was established in 1656 on Pearl Street between Moore and Whitehall streets (DeVoe 1969 [1862]:36). The first market established for the sale of meat was on the Bowling Green beginning in 1658 (DeVoe 1969 [1862]:44). This market survived the transition to English rule of New York and was still the only meat market in 1691 (DeVoe 1969 [1862]:59). In 1692 the Broad Street market was also permitted to sell meat (DeVoe 1969 [1862]:77) and the Coenties Slip Market was established to sell fish.

As early as 1691, specific individuals were identified as the butchers that would slaughter all cattle within the city (DeVoe 1969 [1862]:45). These men included at least one apparently kosher butcher (DeVoe 1969 [1862]:45). In 1735 country butchers were permitted to sell meat in the city by renting stalls in the Fly Market (DeVoe 1969 [1862]:129).

Slaughtering of animals within the New York City limits was regulated as early as 1676. At that time the entire city was south of Wall Street. In

accordance with the law, permits for operating public slaughter houses were issued. The first, at the east end of Pearl Street operated from 1676 to 1696. In 1696, a new slaughter house was built in the East Ward, the old slaughter house having become a public nuisance (DeVoe 1969 [1862]:81).

In 1784, the slaughterhouse was moved from Mulberry Street to two locations, one over the water at Corlaer's Hook and the other at Whitehall (DeVoe 1969 [1862]:297). In 1789 the public slaughter house law was repealed and private operations commenced within the city. These were regulated by a committee of butchers. Some slaughter houses, located at 166, 172, and 174 Mott Street, were in operation in 1817 (DeVoe 1969 [1862]:419).

A reaffirmation of the governmental control of the markets within the city was made in 1763. The only foods permitted to be sold outside of the established city markets were bread, flour, shellfish, lard (in firkins), butter, milk, live fish, and salted beef or pork in barrels or half barrels (DeVoe 1969 [1862]:140). Fresh meat could only be sold in the markets. Barreled meat, while it could be legally sold by cart vendors, would not be a common household purchase. This same law established price controls on meat and dairy products.

The law, as of 1893, forbid anyone who was not a licensed butcher from selling meat within the city. Further, butchers could only sell from his licensed stall at the market. The only foods available at the public markets that hucksters could sell were vegetables, fruit and other items listed on their license. No one was permitted to sell fresh meat (except pork between October

15th and February 15th) anywhere except at the public markets including the adjoining streets. Poultry and eggs had to be sold by the person that brought them into the city (Anonymous 1823).

As New York City grew, so did the number of markets. The Broadway Market (1783), Bear Market (1771), Catherine Market (1786), Greenwich Market (1812), Washington Market (1812), Fulton Market (1821), and others were created as the city population grew. In 1844 there were nine markets with butcher's stalls.

Laws that forbid the raising of livestock within the city were ineffective in regards to hogs. In 1825 hog-carts were introduced although their use was short-lived (DeVoe 1969 [1862]:482). It was the duty of these carts to remove roaming swine from the streets. Cows, particularly draft animals and milk cows, and horses were apparently stabled in the city as late as the early 20th century. It is unlikely, however, that live animals were kept within the more crowded sections of the city. The crowded conditions and numbers of poor would have made this impractical.

Meat Prices

Both retail and wholesale meat prices were found for late 19th century New York City. The wholesale prices were more consistently recorded in the newspapers and include only the most common foods. These prices are for various types of packaged beef and pork as well as whole and live animals. Provisions prices, that is meat packed for the shipping industry and others is the

most consistently listed price (Figure 18). Prices for live poultry, eggs, beef, pork, and sheep are inconsistently present and are complicated by changes in package format. Advertised retail prices were not consistently published.

Wholesale prices, because of their consistency, provide important information about meat price changes over time and the basic relationship of the prices of different types of meat. They do not, however, tell what prices individuals paid for separate cuts of meat. There is certainly a relationship in the changes of wholesale and retail prices but wholesale prices can only provide broad based trends.

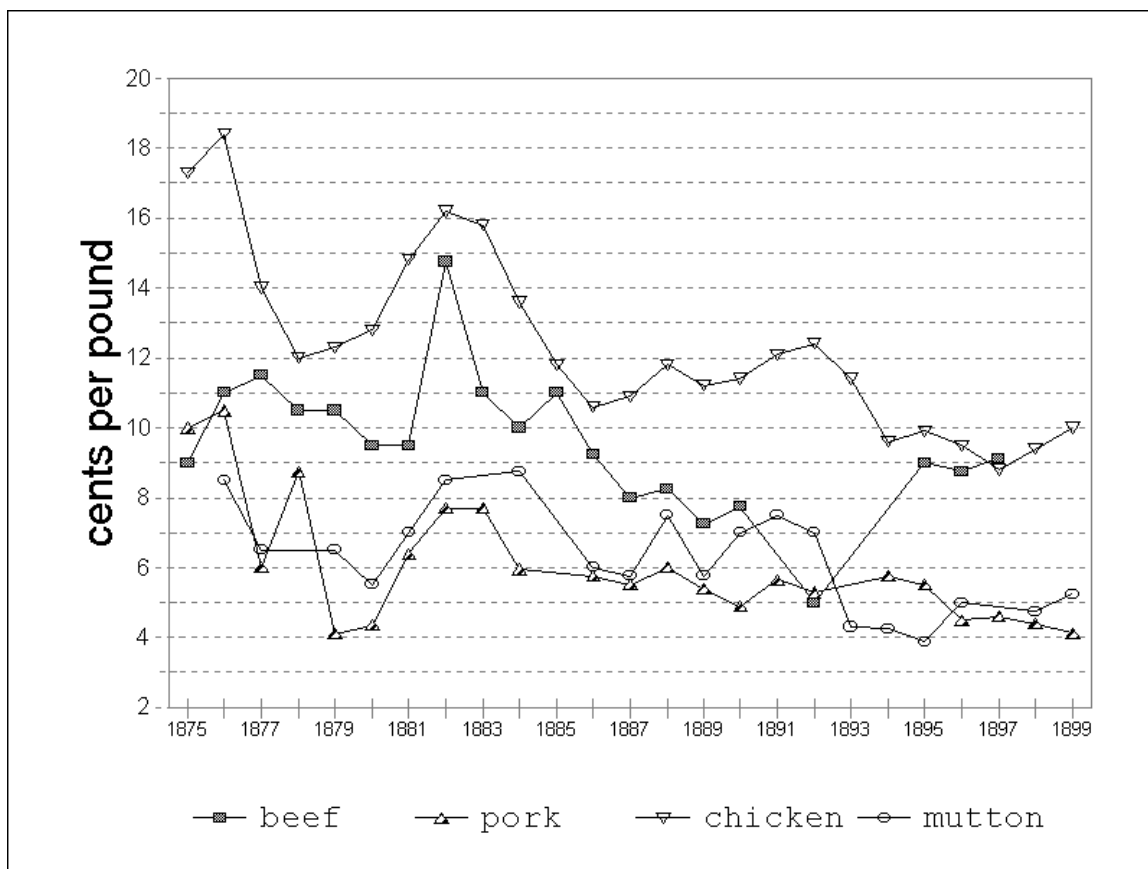


Figure 18. Wholesale meat prices in New York City 1875 - 1900

Retail prices presented in Tables 11- 17 were printed in the *New York Times* and the *New York Daily Tribune* newspapers. In these lists, the most expensive cuts of beef include sirloin and porter house steaks and chuck roast. Sirloin ranged from 24 to 32 cents per pound. Porterhouse steak cost 23 to 28 cents per pound and chuck roast between 26 and 27 cents per pound. Ham cost 25 to 28 cents per pound. Veal cutlets were priced between 25 and 40 cents per pound and filets from 28 to 40 cents per pound. Chickens could range from 20 to 40 cents a pound.

CUT	LOW	HIGH
hind quarter	15	20
fore quarter	10	13
roasting piece	24	30
chuck roast	26	27
round	18	25
rump	17	23
porterhouse	23	28
sirloin	24	32
course cuts	12	18
corned	14	24
smoked	23	28
tongues	1	150

Table 11. Beef Prices (cents per pound), July 1866 (*New York Times*)

CUT	LOW	HIGH
by carcass	9	16
hind quarter	15	25
fore quarter	8	15
cutlets	25	40
filets	28	40
sweetbread	20	25

Table 12. Veal Prices (cents per pound), July 1866 (*New York Times*)

CUT	LOW	HIGH
carcass	11	16
hind	18	22
fore	12	16
chops	20	25
legs	22	25

Table 13. Mutton Prices (cents per pound), July 1866 (*New York Times*)

CUT	LOW	HIGH
roasting pig	2	450
by carcass	13	14
joints	16	20
steaks	20	23
bacon	22	25
ham	24	28
shoulders	16	20

Table 14. Pork prices (cents per pound), July 1866 (*New York Times*).

CUT	LOW	HIGH
venison ham	20	25
venison loin	20	20
venison neck and shoulder	8	12
hares	100	125
rabbits	50	75
squirrel	20	25

Table 15. Game prices (cents per pound), January 1870 (*New York Daily Tribune*)

	May 1866		January 1870	
	low	high	low	high
blackbirds (doz)	75	125		
capons	45	50		
chickens	35	40	20	24
ducks	35	40	18	22
brant (pair)	200	300		
teal (doz)	75	100		
broad bill (doz)	75	125	75	100
fowl	28	33	20	24
geese	22	28	18	20
guinea hen (pr)	75	125		
wild goose (ea)	100	175		
squab (pr)	100	150		
wild pigeon (doz)	225	350		
plover (doz)	350	450		
english snipe	250	350		
turkey	18	35	20	23
red head duck			162	187
black duck			150	175
partridge			150	200
quail			35	40
prairie chicken			125	150

Table 16. Poultry prices May 1866 (*New York Times*) and January 1870 (*New York Daily Tribune*).

MEAT	MAY 1866		SEPTEMBER 1866	
	LOW	HIGH	LOW	HIGH
bass	12	20		
blackfish	12	15	12	15
bluefish			10	12
brook trout	50	100		
catfish	12	15		
soft clam (/100)	35	100		
hard clam (/100)	50	100	50	100
cod	10	12	8	10
cod roe	8	10		
dried cod	10	10		
eels	12	18	15	20
smoked eel (bunch)	22	25		
flounder	10	12	10	12
haddock	10	12	8	10
haddock roe	10	12		
finnan haddie	12	18		
halibut	20	25	15	20
smoked halibut	16	20		
herring	8	10	10	12
lobster	8	10	8	10
salt mackerel (ea)	10	15		
Spanish mackerel			70	75
oyster (per 100)	75	275	75	125
pickled oyster (per 100)	200	300		
perch	12	18		
pickerel	18	22		
pike	12	15		
porgies			10	12
salmon, fresh	75	150		
salmon, smoked	25	30		
salmon, pickled	20	75		
sea bass				
sheepshead			30	35
shad (ea)	25	100		
shad roe (pr)	25	25		
striped bass			20	25
sunfish	9	10		
sounds and tongues	10	15		
smoked whitefish	15	20		
sturgeon			10	12
weakfish			10	12
soft crab /doz			150	175

Table 17. Fish prices May 1866 (*New York Times*) and September 1866 (*New York Daily Tribune*).

Chickens and ducks cost between 20 and 40 cents a pound. Turkey was slightly less expensive at 18 to 35 cents per pound. A pair of squab (domestic pigeon) cost \$1 to \$1.25. On average, birds were more expensive than other forms of meat. Wild birds could be very expensive. Only a few cuts of veal and ham cost more than chickens and ducks.

The relative cost of all types of fowl to beef is significant, especially in light of the menu analysis that shows the upper status people consumed more fowl than lower status people. This is corroborated by a low percentage of fowl in the foods of the lower status families of Atwater's studies. The combination of economic reality and social pretense makes this a more powerful measure of status among faunal remains. The presence of a high percentage of fowl of any type within an archaeological faunal assemblage likely indicates a household of elevated status and wealth.

Butchering

Butchering can be accomplished in any number of ways. There's more than one way to skin a cat, or any other animal for that matter. Regional variations did, and do, exist. The commercial forms of processing described below vary from the way things are done on the farm (Boss 1903).

It should not be assumed that items considered inedible in today's society were waste. Heads, feet, and internal organs, sometimes referred to as offal have use, including food. Tongue was considered a delicacy. Sheep heads could be boiled or grilled. A calf's head might be marketed with or without the skin.

About one third of the head is meat high in oil and fat that makes a rich soup (Smith 1884:77). The meat may also be made into forcemeat or, in modern terms, meat balls. A pig's head has a greater proportion of meat than other animals (Smith 1884:77).

Feet are high in oil and gelatin. While pigs feet are often eaten pickled, calve's feet were commonly made into calve's foot jelly, a precursor to Jello. There is also a tradition in England for the consumption of blood in pudding. The quality of internal organs as food varies but all are considered edible.

There are other uses for offal. Fat was processed into lard. Backbones, heads, feet and other trimmings were used to render lard or make sausage. Inferior lard was further made into oil. Stearine, a by-product of lard was used for soap and candles (Cist 1867).

Poultry and fowl

Poultry includes a variety of birds including chicken, turkey, guinea fowl, pheasants (including peafowl), quails, pigeons, ducks, geese, and swans (Atwater 1903). Lists from the New York City markets printed in the *New York Daily Tribune* and *New York Times* indicate that along with the above varieties of birds, other wild species were available. Listed types include woodcock, reed bird, teal, partridge, redheaded duck, canvasback duck, prairie chicken, black duck, partridge, snipe, and robin.

Poultry was generally sent to markets dead. The preferred means of killing and bleeding fowl was by sticking them in the roof of the mouth. All

feathers were plucked except for those on the neck, head, tail, and wing tips. (Atwater 1903:17). The birds may be dry plucked (Atwater 1903) or scalded (Anonymous 1891:8). The head is not to be dipped when scalding or the eyes become shrunken making it appear the bird was sick (Anonymous 1891:8). Birds may be taken to market in this condition or packed in barrels with ice (Howard 1897:34).

The salient point about this description of market preparation is that the head, feet, and wing tips are not removed. All skeletal parts of fowl may end up in the household. Finding chicken heads and feet in an archaeological site is not a positive indicator that animals were raised at the site.

Hogs

It has been recognized for centuries that pork can be smoked and salted for long term preservation. This made hog raising an important aspect of the economy before refrigeration. Hogs could be raised cheaply, salted, and stored for long periods of time. This was important not only on farms, but also for shipping.

The first packing house in Chicago opened in 1827. Packing in Cincinnati began about this same time. In 1833, 85,000 hogs were packed in Cincinnati (Cist 1867:383). By 1843, 250,000 head were packed (Vaughn 1915:272). The highest number packed was 1863 when 608,457 hogs were packed. Much of this was to supply the U.S. Army (Vaughn 1915:272). During this same year over 904,000 hogs were packed in Chicago. Chicago developed as the major meat

packing center. By 1863, there were 58 meat packing businesses in Chicago (Vaughn 1915:273).

The method of hog processing in Cincinnati began with “knocking”; Where a two pointed hammer is applied forcibly to the head (Cist 1867). The throat was cut to drain blood and then the animal was scalded. The hair was then removed and the bristles and hair separated for brushes and curled hair markets. After this, the animal was gutted, the head and feet removed and the remainder cut into three parts, a ham end, shoulder end, and middle. These parts were divided into single pieces and the lard was removed. Head and feet parts were sent to sausage manufacturers.

A portion of the pork was put up in barrels. The fattest hogs made up clear and mess pork. The rest became prime pork or bacon. By law, clear pork was required to have the sides with the ribs out. Mess pork required two rumps to the barrel. Mess pork was used to supply the U.S. Navy while prime was used on commercial ships and went to southern markets. Clear pork was purchased by the New England fisheries industries (Cist 1867).

A large part of the pork was smoked and made into bacon. Hams, sides, and shoulders were packed separately after smoking. Much of the bacon was sold in the coal mining regions and in eastern cities. A great percentage of hams, rather than being salted, were sugar cured (Cist 1867).

Cows

Beef was not processed on a commercial scale until around 1875 (Vaughn 1915:60). Some commercial canning was done, but the biggest change was the advent of mechanized refrigeration. Before this time, the only means of packing beef was in barrels of salt or pickle. Before refrigerators, cattle were sold live. To move live cattle from Kentucky to New York, the cattle would be herded to Cincinnati, taken by box car to Cleveland, shipped to Buffalo by boat. After a rest, the cattle would be herded to Canadaigua, then to Albany where they would begin the final trip to New York City by boat (Vaughn 1915:60).

In 1875, Gustav Swift completed the first successful shipment of refrigerated beef from Chicago to New York City. With this technology beef could be slaughtered and waste removed before shipping. With an estimated 40% to 44% waste from a live cow, there was a clear savings in shipping cost (Vaughn 1915:65). There was also an accompanying savings in feed and water on the trip and no loss due to death of animals. This meant packing houses could move west to the source and send only the food portions to market in the East.

By 1915, a more standardized process for slaughter and butchering had been established in the Chicago packing houses (Vaughn 1915). This was related to the factory-like setting in which these operations occurred. Animals were killed and cut into wholesale cuts, sent to markets, and cut for retail by

butchers. Beef slaughter and butchering in the processing plant was similar to that for pigs.

Cows would be knocked in the head with a sledge hammer. The carcass would be raised by the hind legs, bled, and the head removed. The internal organs and the hide would then be removed. The back was then split and the sides left to age (Vaughn 1915).

Vaughn states that the offal, the head, feet, hide, blood, and internal organs, were formerly thrown away. This was likely true during the early years of industrialized meat processing. It certainly was not true in small butcher operations prior to refrigeration and trains.

The aged sides of beef are first cut into two wholesale cuts, the forequarter and hindquarter. These were usually separated between the 12th and 13th ribs (Vaughn 1915:36). The hindquarter contained the round, loin, and flank. Cuts from the forequarter were the rib, chuck, plate, and shank. The loin was cut from the round between the femur and innominate. The shank was sawed below the scapula-humeral joint. Rib and chuck portions are separated between the fifth and sixth rib (Vaughn 1915:37).

Vaughn's description of butchering is based on what he saw at Chicago packing houses. Regional variation in butchering did exist. Figure 19 illustrates four different patterns between four different cities in 1929. As will be discussed later, these variations place some elements within different cuts of meat, depending on the pattern used. For example, the rib cut in New York

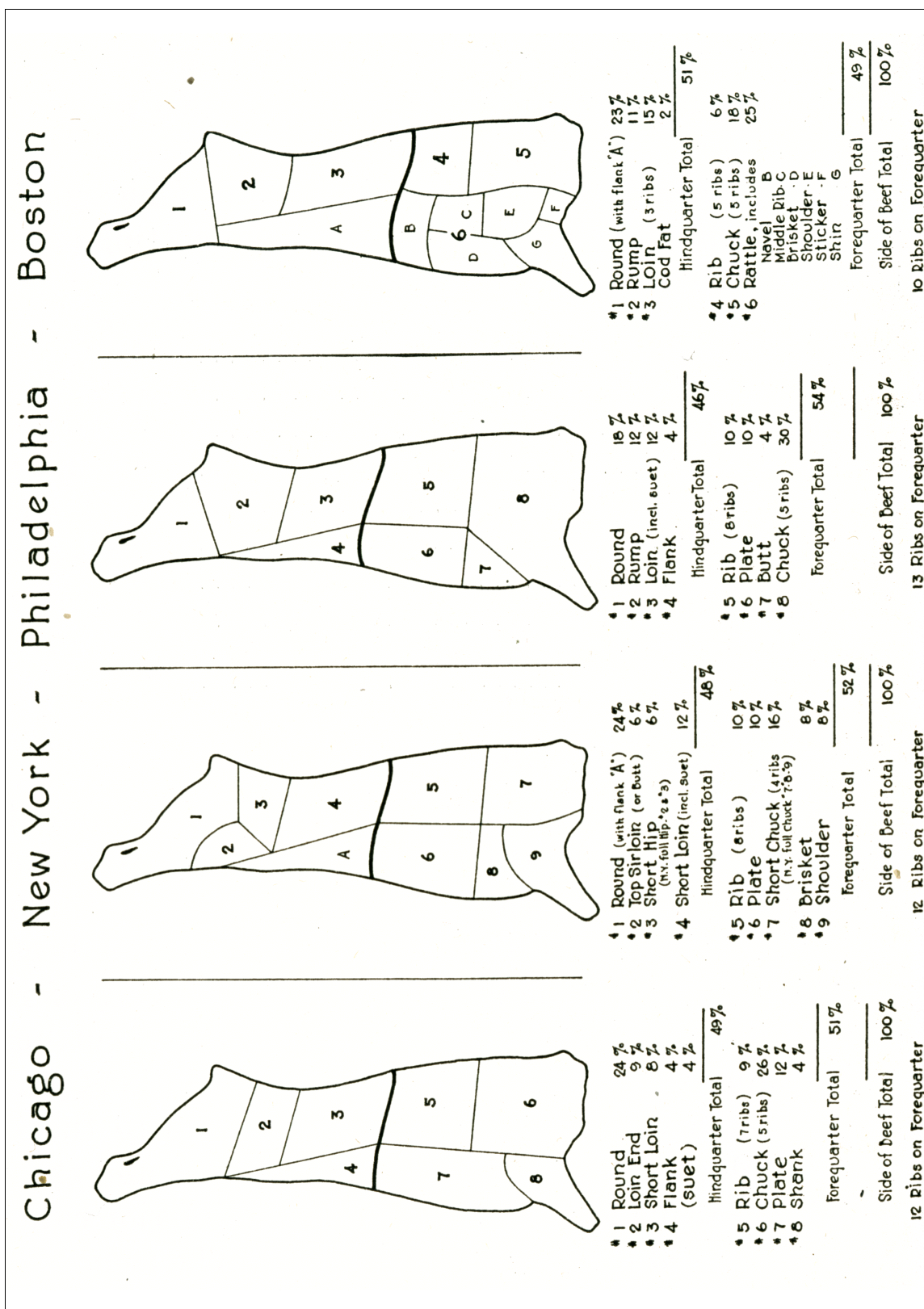


Figure 19. Regional variation of meat cuts (Rhoades 1929)

City and Philadelphia contained 10 ribs. In the Chicago rib-cut, only seven ribs were present and in Boston only five. Variation in these patterns has not been addressed by archaeologists.

Sheep

Sheep raising can be profitable through their wool or for their meat. In the areas around the major eastern cities, mutton was more profitable than wool (Commissioner of Agriculture 1867:349).

Mutton sheep are slaughtered by cutting veins in the neck, or sticking. Wholesale cuts include the saddle and rack. The saddle includes the loin and leg. The rack is made of the chuck, short rack, and breast. One rib is left with the loin and the hotel rack has from nine to 11 ribs. The chuck and brisket are commonly sold together. The back, loin, and hindquarter are the more expensive parts (Vaughn 1915:173).

Cuts of Meat

Cuts of meat refer to the names butchers place on different parts of the animal. There are names for wholesale cuts and retail cuts. For cow and pig, the basic wholesale cuts are the forequarter and hindquarter. Because of the smaller size, lamb and mutton are typically sold in carcass form at the wholesale level (Rhoades 1929:75).

Forcing perceived butchering patterns to modern butcher charts denies geographically variable butchering patterns that were readily acknowledged (Levie 1970:161; Rhoades 1929:37; Bull 1951:69). Rhoades (1929) details the

Chicago style of cutting while acknowledging other styles. The New York style of cutting produces smaller cuts as favored in New York and the East (Bull 1951:69).

Butchering charts published in 1895 by the U.S. Department of Agriculture were intended to provide reference to the works of the Department (USDA 1895:572) (Figure 20). The *White House Cook Book*, *Practical Housekeeping*, and *Imperial Cook Book* include charts for butchering (Figures 21-28). In the butcher charts provided in *The White House Cook Book*, 18 cuts of beef are identified (Figure 21). These are derived from two wholesale cuts: hind quarter and fore quarter. From the hind quarter come choice roasts, porterhouse and sirloin steaks, rump and round roasts, shin, flank, and other pieces. The forequarter provides fore ribs, middle ribs, and chuck ribs, brisket, shoulder piece, neck, shin, and cheek. *The White House Cook Book* also indicates the relative status and quality of the different cuts. This provides an important link between modern cuts and their value as estimated from price lists and the perceived social value of the various cuts.

In *The White House Cook Book* the highest, or first quality, pieces include the porterhouse and sirloin (with kidney suet), rump steak, and fore rib. Second class pieces are the buttock or round, thick flank, and middle rib. Third class pieces are the aitch bone, mouse round, thin flank, chuck, shoulder, and brisket. The neck is considered fourth class, with the shin, or shank, fifth class. Veal are divided into ten pieces according to *The White House Cook Book* (Figure 22).

The hind quarter includes the loin, fillet, chump-end loin, and hock. The forequarter yields the neck, breast (best end), breast (brisket end), blade bone, knuckle, and neck.

Six pork cuts include leg, hind loin, fore loin (ribs), spare rib, shoulder, and brisket (Figure 23). Mutton cuts total seven (Figure 24). These include the leg, shoulder, loin (best end and chump end), rib chops, breast, and neck.

Illustrations from *Imperial Cook Book* are very similar to those from *The White House Cook Book*. In fact, the charts are so similar that it is believed that the *Imperial Cook Book* copied them from *The White House Cook Book*. The charts from the *Imperial Cook Book* are not included here.

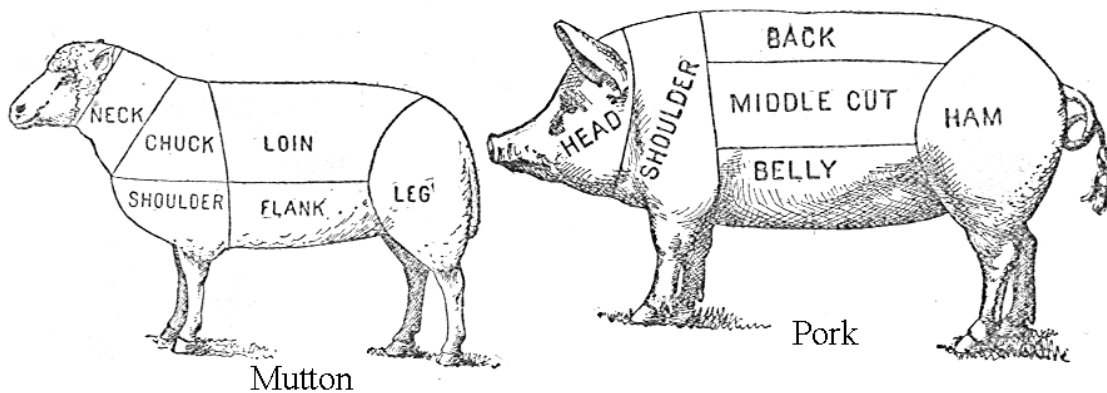
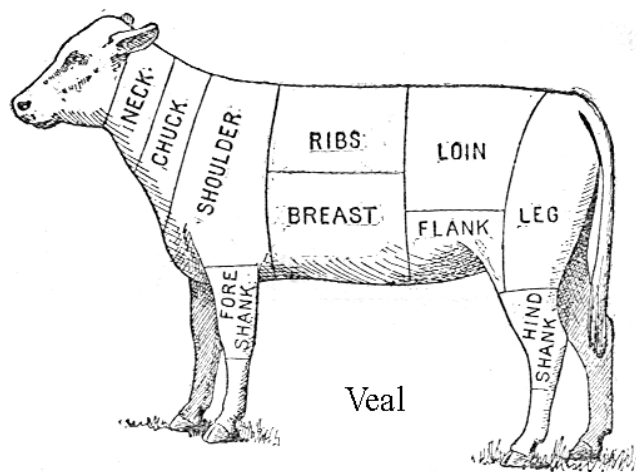
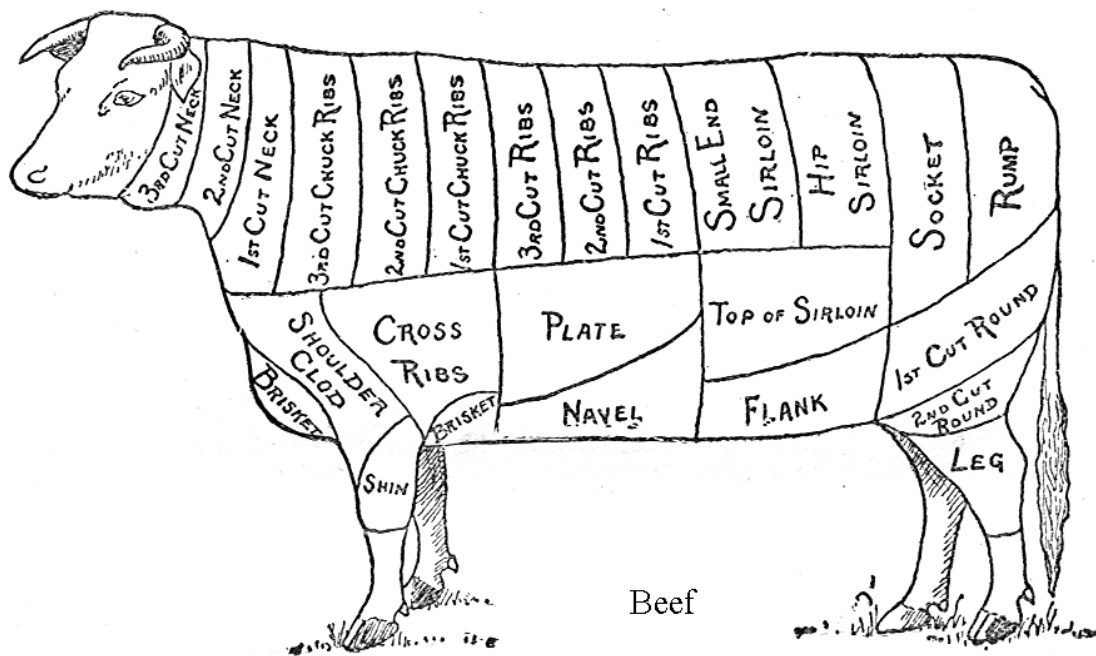
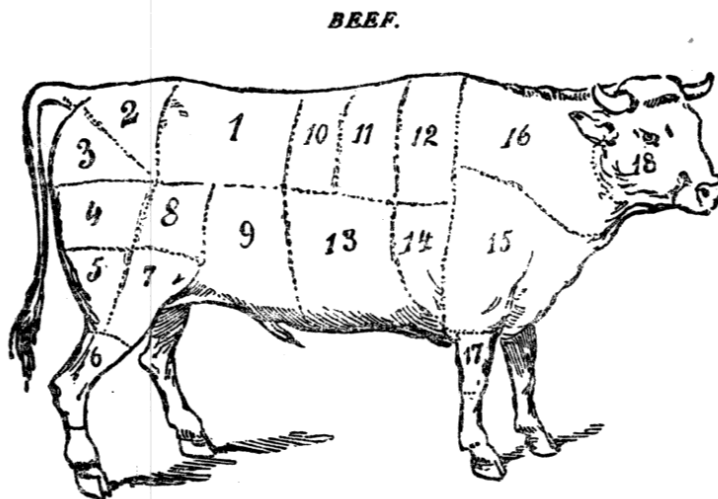


Figure 20. U.S. Department of Agriculture 1895 meat charts



Hind Quarter

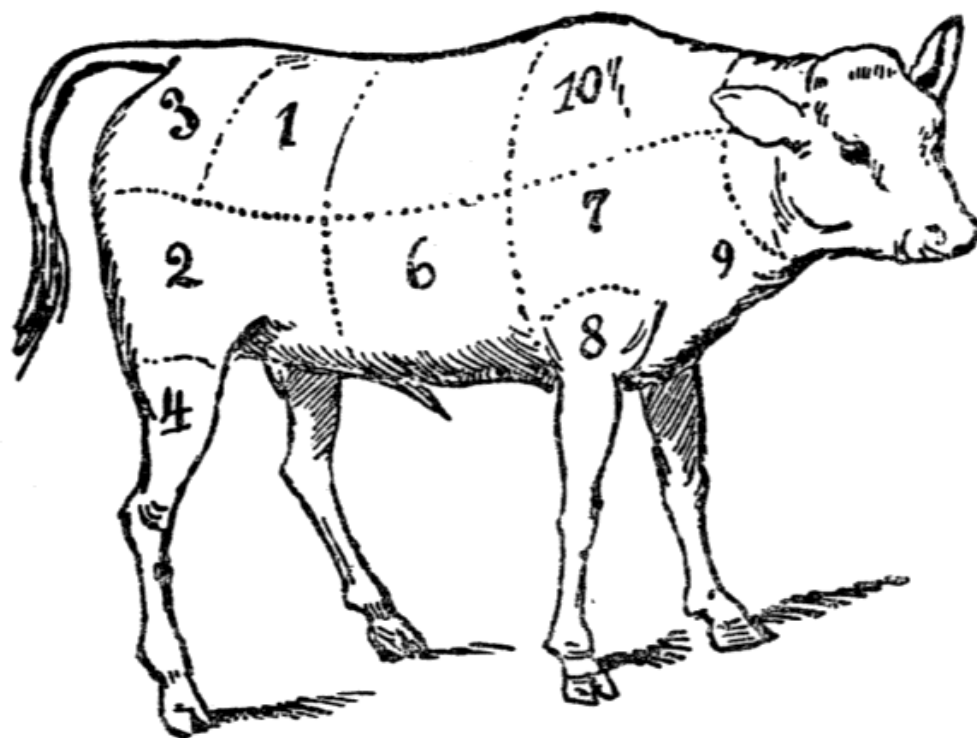
1. Used for choice roasts, porter house and sirloin steaks
2. Rump
3. Aitch bone
4. Buttock or round
5. Mouse round
6. Shin
7. Thick flank
8. Veiny piece
9. Thin flank

Fore Quarter

10. Five ribs (fore rib)
11. Middle ribs
12. Chuck ribs
13. Brisket
14. Shoulder piece
- 15, 16. Neck or clod
17. Shank or shin
18. Cheek

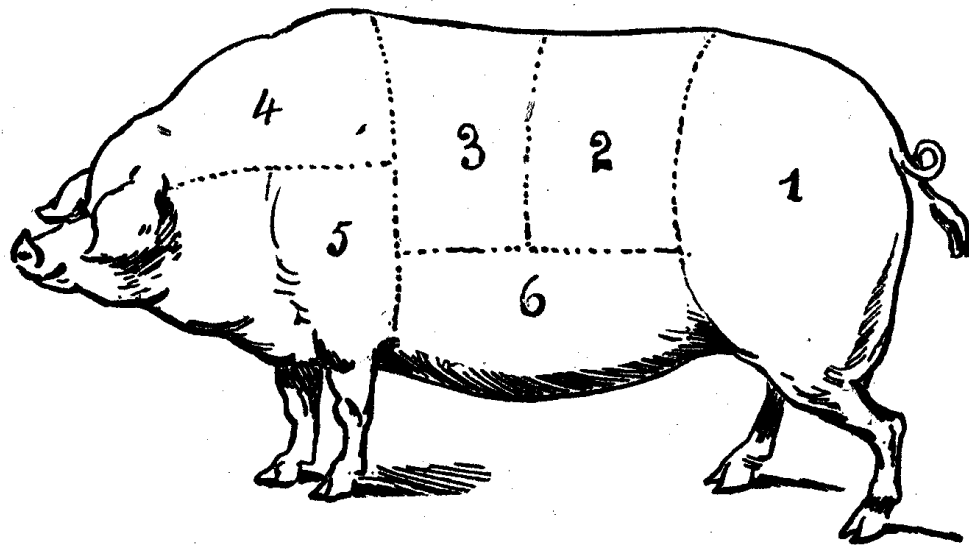
Figure 21. Beef Cut chart from *The White House Cook Book*

VEAL.



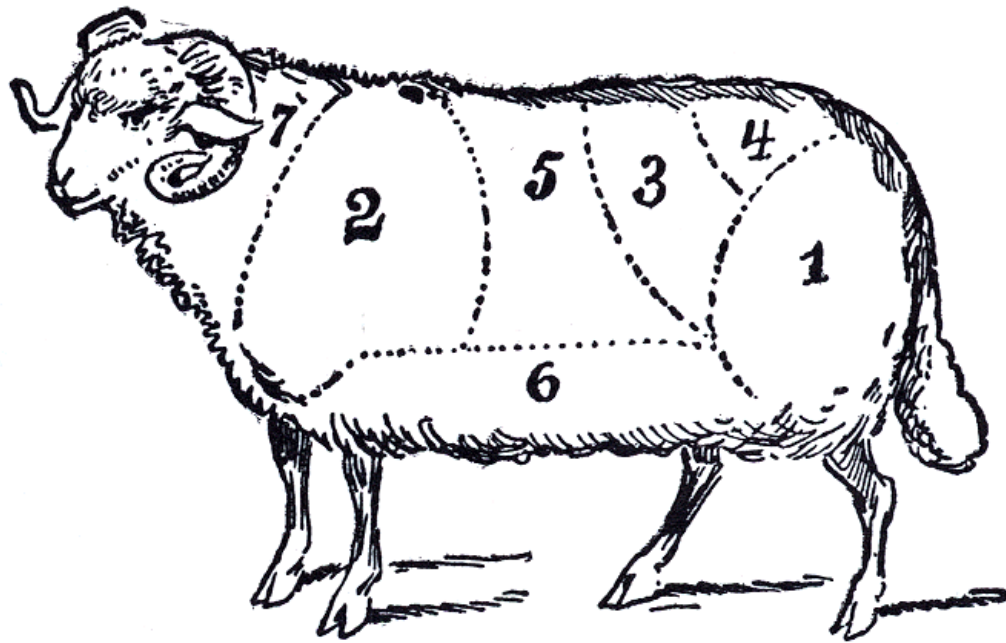
1. Loin, choice end
2. Fillet
3. Loin, chump end
4. Hind knuckle
5. Neck, best end
6. Breast, best end
7. Blade bone
8. Fore knuckle
9. Breast, brisket end
10. Neck, scrag end

Figure 22. Veal cuts from *The White House Cook Book*



1. Leg.
2. Hind loin
3. Fore loin
4. Spare rib
5. Shoulder
6. Brisket and flank

Figure 23. Pork chart from *The White House Cook Book*.



1. Leg
2. Shoulder
3. Loin, best end
4. Loin, chump end
5. Rack or rib chops
6. Breast
7. Neck or scrag end

Figure 24. Mutton cuts from *The White House Cook Book*

Practical Housekeeping also contains charts for the division of animals also. These charts list the uses of the various parts but not the perceived value of the cuts. Beef is divided into forequarter and hindquarter (Figure 25). The hindquarter cuts include the rump (1), round (2), shank (3), rump steaks (4), veiny piece (5), sirloin (6), flank (7), and porter house (8). According to the text, the rump is best used for corned beef. The rump steaks, part of the round, sirloin, and porterhouse are all for steaks with sirloin being best. Flank and veiny piece and part of the round are for corning or drying. The shank is for soup.

The forequarter is divided into the rib-piece (1), plate (2), fore-shank (3), three types of rib roasts (5,6,7), neck (8), and an un-named piece (9). The rib piece, plate, neck, and un-named piece are for corning or boiling. Foreshank is for soup. The three types of rib roasts are graded first cut, best cut, and chuck rib. The best cut is said to be the best roast in the beef. The chuck rib is for pot roast.

Veal is divided into ten cuts (Figure 26). The loin is divided into a best end and chump end. There is the fillet, knuckle, fore-knuckle, neck (two cuts), blade bone, breast, and brisket. According to the chart, both ends of the loin, the best end of the neck, and fillet are for roasting. Stewing pieces are the brisket, breast, scrag end of the neck, fore-knuckle, and knuckle. No specific use is mentioned for the blade bone.

Forequarter cuts

7. Rump
8. Round
9. Shank
10. Rump steak
11. Veiny piece
12. Sirloin

Hindquarter

13. Flank
14. Porterhouse

Hindquarter cuts

1. Rib piece
2. Plate
3. Fore-shank
4. Rib roast, first cut
5. Rib roast, best cut
6. Chuck rib roast
7. Neck
8. Best for corn beef

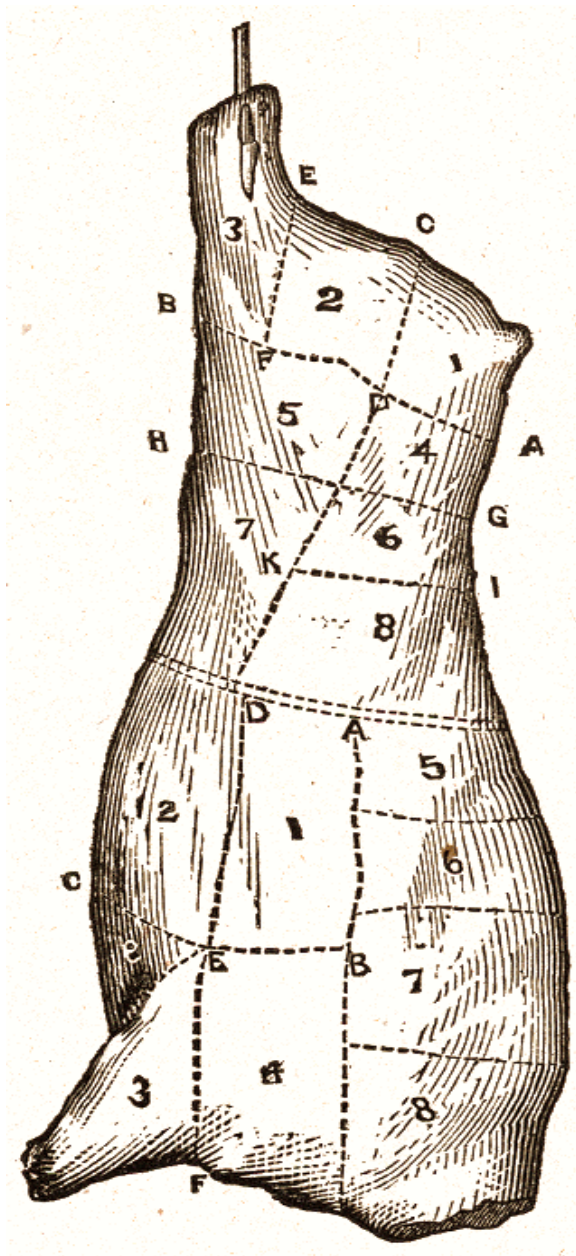
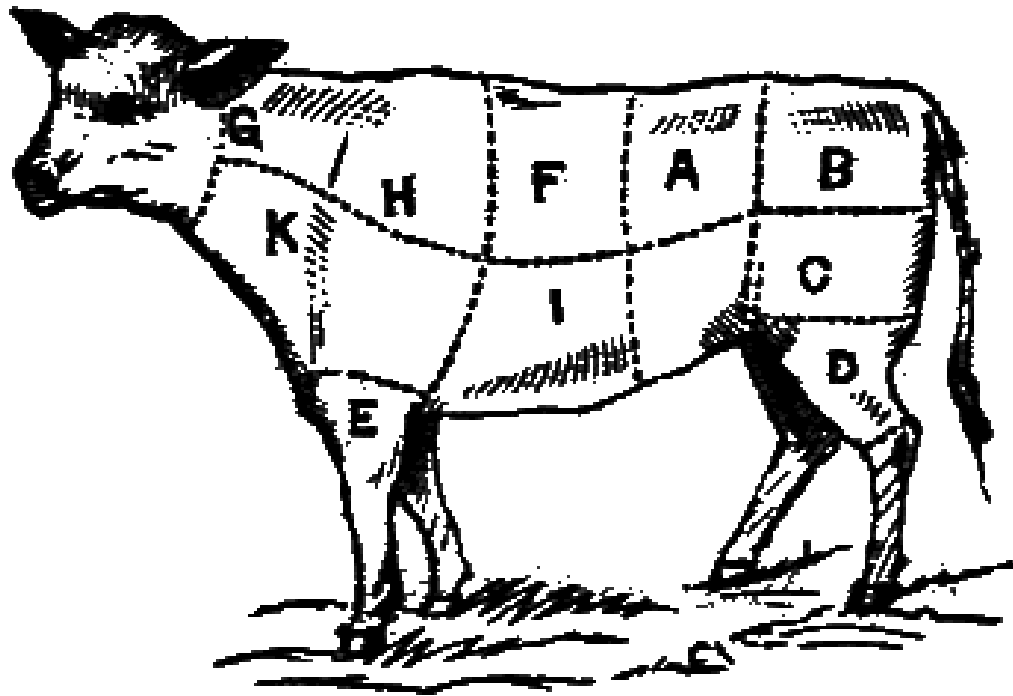


Figure 25. Beef cut chart from *Practical Housekeeping*



- A. Loin, best end
- B. Loin, chump end
- C. Fillet
- D. Knuckle
- E. Fore-knuckle
- F. Neck, best end
- G. Neck, scrag end
- H. Blade bone
- I. Breast
- J. Brisket

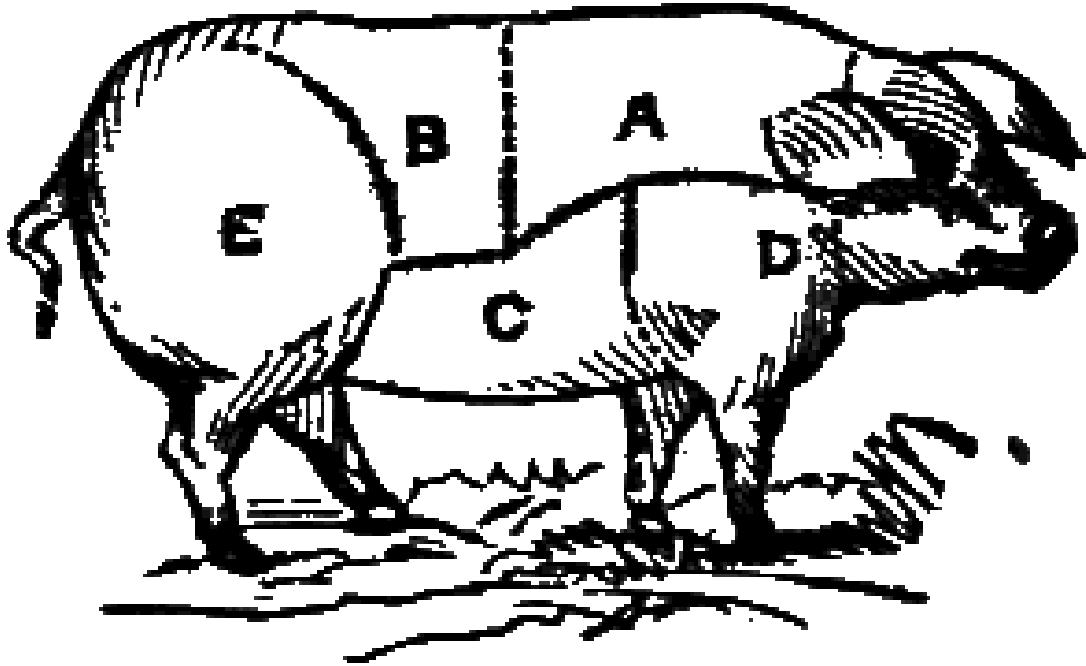
Figure 26. Veal Cuts from *Practical Housekeeping*

The pig chart shows five parts (Figure 27). The back and loin are for fresh roasts. The bacon, shoulder, and ham are to be cured. As a note, the definition of bacon has changed. Bacon used to refer to any piece of salted and smoked pork. The 1839, *Kentucky Housewife* shows the hind portion of a pig as either a leg of pork or ham of bacon (Bryan 1839).

Seven cuts are shown for mutton (Figure 28). These include the leg, loin, rump, chops, fore-shoulder, neck, and brisket. Pieces for roasting include the loin, rump, and neck. The leg and fore-shoulder are boiling pieces. Chops are for broiling and the brisket is for stew.

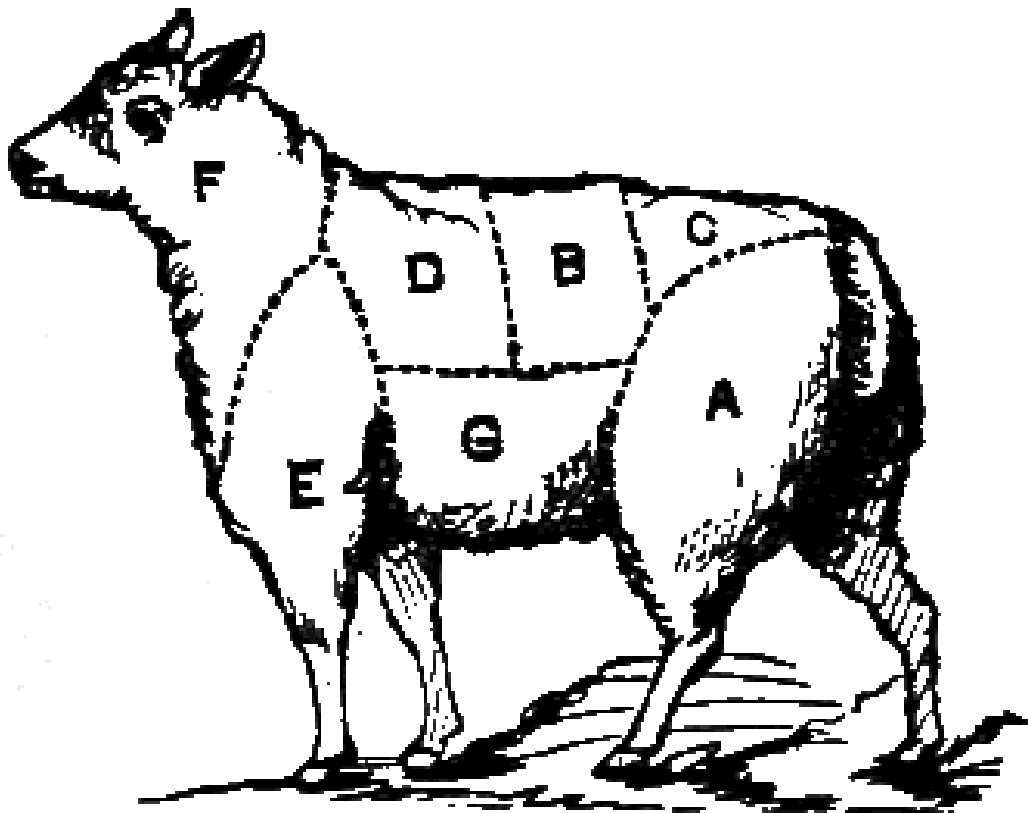
Information contained in these charts is instructive in different ways. On the surface, these charts tell us what types of meat were used for different dishes relating to the preparation techniques. The chart from *The White House Cook Book* also lists the relative value in terms of quality of the different types of meat. This scaling of cuts can be directly compared to retail price lists.

Additionally, the means of dividing and using the carcass can be applied to interpretations of archaeological faunal samples. Often, rib portions of bone are lumped into a rib category. It is clear from the charts that ribs were divided into cuts of varying quality and these cuts were differentially used. Archaeologists need to recognize this fact and attempt to define which rib portions are included in assemblages. This is also true of the thoracic vertebrae.



- A. Back
- B. Loin
- C. Bacon
- D. Shoulder
- E. Ham

Figure 27. Pork cuts chart from *Practical Housekeeping*



- A. Leg (for boiling)
- B. Loin (for roast)
- C. Rump (for roast)
- D. Chops (frying or broiling)
- E. Fore-shoulder (boiling)
- F. Neck (stewing or roasting)
- G. Brisket (stewing)

Figure 28. Chart of mutton cuts from *Practical Housekeeping*

Based on the butchering charts, the different cuts of meat identified in the menus can be related to specific portions of animals. Specific portions of bones found at archaeological sites can also be related to specific cuts based on the charts. Meat cut analysis has become a common approach to the analysis of historic period faunal remains since the Shultz and Gusts article in 1983. Such studies have expanded beyond the limitation of beef cuts to include pork and sheep. Examining the cuts of meat presented in the menus, therefore, provides an important comparison to archaeological meat cut analysis.

The cuts of meat in the different menus are recorded in the data tables wherever found. *Practical Housekeeping* and the *Imperial Cook Book* allow homeowners to choose from different cuts for many of the meals. That is, they do not specify a particular cut of meat. *The Table* and *The White House Cook Book* provide specific cuts on a more regular basis but not for all listed meats.

The Table

Overall, there are 548 individual cuts identified in the menus from *The Table*. Surprisingly, the most commonly listed cut is head with 115 occurrences (20.98%). Brisket and tenderloin were the second most common with 108 occurrences each (19.7%). In *The White House Cook Book* charts (Chapter 7) brisket is listed as a third class cut. Tenderloin is one of the first class cuts. Shin cuts are listed 71 times (12.9%). Shin, like heads are among the least expensive (and lowest class) cuts available. Marrow bones are used 38 times.

Prime rib is present 31 times and rump 27. These two cuts are listed as prime in *The White House Cook Book*. Brain, tongue, and palate are also listed but these cuts do not yield bones.

Grouped by class, the cuts of beef in the menus in *The Table* show a preponderance of lower class cuts. There are 186 fifth class cuts (head and shin), 108 third class cuts (brisket) and 166 first class cuts (tenderloin, rump, prime rib). This pattern would not be expected under the common standard of analysis of beef cuts (Shultz and Gust 1983). Clearly, the upper status households did not restrict themselves to expensive meat. The more stylized format of meals, particularly dinner, required a large number of lower status cuts.

Menus from *The Table* show differential beef use between holidays and non-holidays (Table 18) (Figure 29). Only two beef cuts are presented in holiday meals, head and shin, two soup cuts. On non-holidays, heads represent only 9.75% of beef cuts and shins 28.16%. The most common cut of beef on non-holidays was brisket tenderloin at 40.07%. Shin was second most common, and prime rib accounted for 11.19% of the cuts. Rump was present 6.86% of the time and brisket 3.61%. On holidays, however, head and feet elements are the only ones seen.

	HOLIDAY		Non-holiday	
	N	%	N	%
BRISKET	0	0	108	19.82
TENDERLOIN	0	0	108	19.81
HEAD	2	66.67	93	17.06
SHIN	1	33.33	70	12.84
BONES	0	0	38	6.97
PRIME RIB	0	0	31	5.69
BRAIN	0	0	29	5.32
RUMP	0	0	27	4.95
CALF HEAD	0	0	20	3.67
TONGUE	0	0	18	3.30
PALATE	0	0	3	0.55

Table 18. Beef cuts between holidays and non-holidays in *The Table*

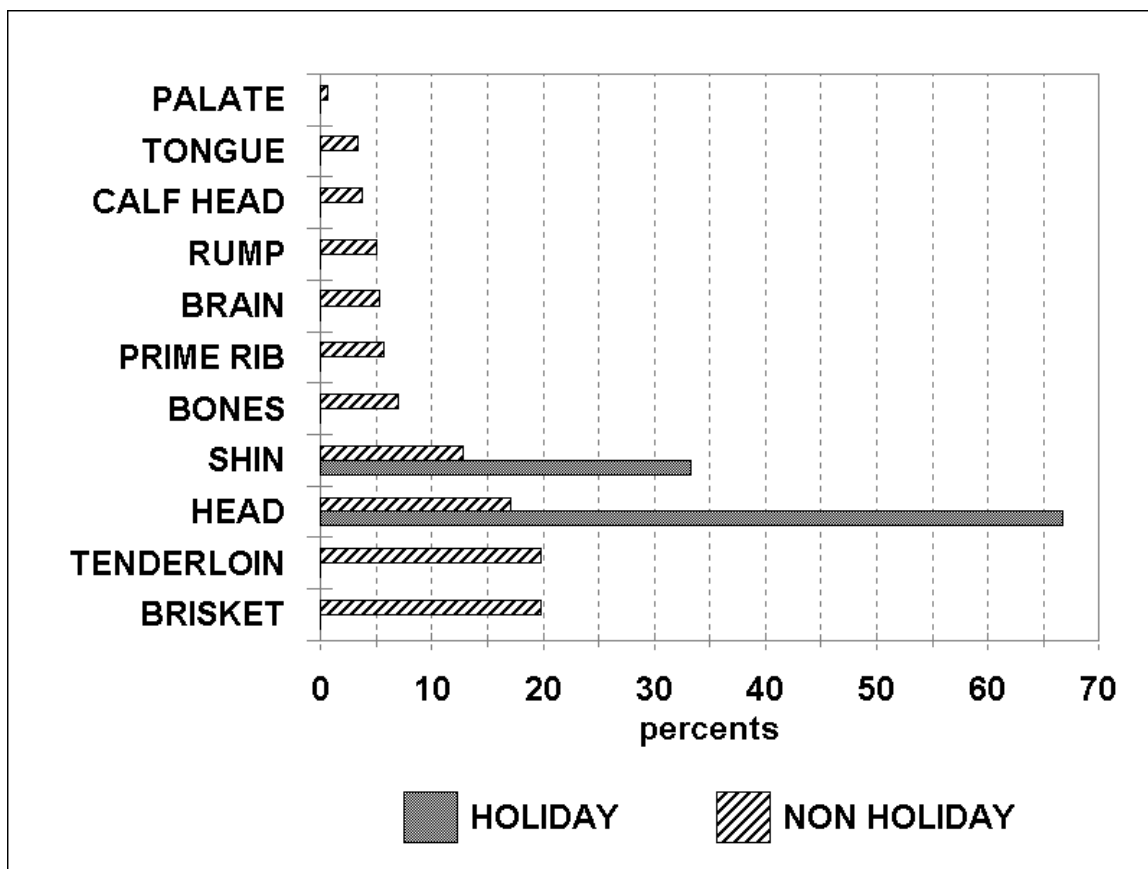


Figure 29. Comparison of beef cuts between holidays and non-holidays in *The Table*

The White House Cook Book

There was a total of 43 beef cuts identified in the menus from *The White House Cook Book* including both holidays and non-holidays (Table 19). The single most common cut was head with seven occurrences (16.27%). This was followed by feet and porter house steak both with six occurrences (13.95%). Tail shin and rump each occurred four times. Round and sirloin were present three times each. One recipe called for either rump or flank. Tenderloin was listed twice and brisket and rib or loin once each. By class, there were 21 fifth-class cuts (head, feet, shin), 16 first-class cuts (tenderloin, sirloin, porterhouse, rump), and 7 third-class cuts. Like *The Table*, this shows a greater number of low class cuts.

CUT	HOLIDAY		Non-holiday	
HEAD	1	33.33	6	15.00
FEET	1	33.33	5	12.50
PORTERHOUSE	1	33.33	5	12.50
TAIL	0	0	4	10.00
SHIN	0	0	4	10.00
RUMP	0	0	4	10.00
ROUND	0	0	3	7.50
SIRLOIN	0	0	3	7.50
RUMP OR FLANK	0	0	2	5.00
TENDERLOIN	0	0	2	5.00
RIB OR LOIN	0	0	1	2.50
BRISKET	0	0	1	2.50

Table 19. Beef cuts between holidays and non-holidays in *The White House Cook Book*

Of the holiday dishes, beef cuts include one from the feet, one from the head, and one porterhouse steak. Of the identified cuts on non-holiday meals, head portions were most common with 15% (Figure 29). Feet and porterhouse accounted for another 12.5% each of non-holiday cuts. Rump, tail, and shin followed in representation at 10% each. Round and sirloin were each 7.5% of the cuts.

In *The White House Cook Book*, pork is generally not referenced to a particular cut. Of 23 meals, only three are referenced, and they are feet. Bacon, served four times, is twice referenced as bacon brisket. Pork and bacon do not appear in holiday meals and ham occurs only once. It seems that ham is allowed at special meals but that other pork products are relegated to more mundane and private times.

Mutton is listed 30 times, but not for a holiday meal. Leg of mutton is referenced four times and loin twice. Other cuts are not identified. For non-holidays, lamb is listed as hindquarter and forequarter (each twice) but 17 other meals do not specify a cut. Lamb appears four times in the holiday menus. In three instances hindquarter is mentioned. In the fourth meal, the cut of meat is not specified.

Practical Housekeeping

In *Practical Housekeeping*, only six beef dishes are listed for holidays, and four of these are tongue. A sirloin steak and a tenderloin are listed also. On non-holiday meals, 103 beef dishes are served. Steaks, of unspecific type,

account for 55.34% of these dishes. Another 29.13% of the beef dishes do not include instruction on what cut to use. It is one of the characteristics of this text to not provide specific instruction but rather a more general guidance.

While the numbers are small, there seems to be a significant difference between these menus and those in *The Table* and *The White House Cook Book*. Unlike the other two books, *Practical Housekeeping* calls for expensive steaks on holidays. This is likely related to the more simple structure of the meals.

Imperial Cook Book

Only 20 particular cuts of meat are identified in the menus of the *Imperial Cook Book*. These are four mutton cuts, three veal cuts, two pork cuts, and one from venison. The remainder are from beef. Like *Practical Housekeeping*, this book uses a lot of leftovers and provides less rigid guidance in the interest of economy.

Interpretation

Analysis of cuts as indicated by the menus is informative. Because of the pervasiveness of beef, more cuts are identified. Lamb cuts do not seem to provide any information towards status or differential use. With pork products, only ham is identified on holidays indicating that large proportions of ham bones may be indicators of higher status.

With beef, the analysis of cuts provides interesting contrasts to current archaeological thought. In the higher status books, and on holidays, most of the

beef cuts were from head and feet elements. Steaks and chops were not greatly represented as they would be if these cuts were truly high status markers. The greater abundance of soup elements is attributed to the serving of soup as the first course of special meals.

In the lower status books, special meals contain better quality meats such as tenderloin and sirloin steak. A faunal assemblage produced from the menus of the *Imperial Cook Book* contain a higher proportion of roasts and steaks. Under the prevailing ranking system, this form of assemblage would be interpreted as higher status assemblage than one produced from *The Table* or *The White House Cook Book* which would have a greater proportion of soup cuts.

This variation can be reconciled in the following manner. Sirloin steaks and roasts are better quality and are stated as being a better class of meat than soup cuts. However, status presentation of a formal meal including the various courses includes soups. The primary meat, as seen in the meat analysis, is often poultry. The heavy use of first class cuts without high percentages of fowl and soup bones therefore indicates middle class to lower class assemblages. The form of presentation in these households did not attain the complexity that was reached in wealthy households.

The meal structure in the upper status households would be the most complex, including the full set of courses, beginning with soups. These soups are made from shins and heads. Also, as demonstrated previously, fowl appears to be more closely associated with status than does beef. On holidays, fowl is

served more often. With the use of fowl, rather than beef roasts, and the use of soups as the early course, less expensive cuts of beef are more common than are the expensive cuts.

The analysis of menus for status information has indicated various aspects of the faunal record that should be examined for determinations of status. These include the variety of species within the faunal assemblage, the relative amounts of some species and classes of animals compared to others, and the representation of various portions of animals within the assemblage.

The menu analysis is complimented by other analyses and statements from historic documents. The meals of lower status households recorded by Delaney provide an important look at actual foods used in households. Meat charts, especially those from *The White House Cook Book*, provide an explicit statement about meat and how it should be used.

Lessons from the Texts

The Shultz and Gust method of interpreting social status from faunal remains includes analysis of a limited subset of recovered faunal assemblages, cow bones, along economic lines (Shultz and Gust 1983). In theory, a site that has a high proportion of expensive cuts would be interpreted as a high status site. Steaks and roasts, the meatier and more expensive cuts are generally associated with roasting, a cooking method seen as generally unavailable to those of lower economic means.

However, the document analysis presented above has provided an alternative perspective. The analysis of meat representation shows that beef is the most common meat consumed. This is across the board regardless of status. At times of higher social display, beef decreases in use and fowl is substituted. Lower status households, like those seen in the Delaney studies, rarely used fowl while the socially prominent consumed birds in quantity.

As for the types of beef consumed, there are two important aspects of use derived from these studies. At socially prominent meals, lower quality cuts were dominant. These lower quality cuts were present in the meals as soup or gelatin (dessert). Steaks and roasts were more common on non-socially significant meals. Corresponding to this, lower status households used more high quality cuts than other types. Everyone, it appears, likes a good steak or roast. It is interpreted that estimates of status based on beef cuts would over estimate the status of low status households and underestimate the position of high status deposits.

Another aspect of the patterns of meat use suggests that those of less economic means consumed a greater proportion of pork and ham than those of higher status. Coupled with the statements made earlier about the upper status position of fowl, it would seem likely that an index of status could be derived by dividing the relative amount of pig elements by the relative amount of fowl. The lower the result the higher the status of the site.

Archaeological studies in New York City have been conducted on sites of various socioeconomic positions. Three studies are presented in the next chapter to provide an archaeological test of the patterns identified above. The sites selected for use were investigated for regulatory compliance of cultural resource legislation. A site of high status, middle class status, and lower working class status are included here as a test of the interpretive ideas garnered from the analysis of the cookbooks.

CHAPTER 8: RECOGNIZING STATUS IN ARCHAEOLOGICAL FAUNAL ASSEMBLAGES

The above analysis of menus and examination of other texts was undertaken in order to gain an understanding of the way meat was used socially. This understanding should provide a guide for interpreting status from archaeologically derived faunal assemblages. At one level, the reasoning is that both faunal assemblages, and the menus of the cookbooks, are artifacts of the way people ordered their world and used meats to reinforce that order. The cookbooks are artifacts of how things ought to be, and the archaeological faunal remains, barring problems of deposition and recovery, are how things really were. The cookbook menus and faunal remains are, then, different expressions of the same mental constructs.

At another level, the associations of meats and status defined in the menu analysis constitute a division of special meals, or feasts, from the ordinary. This provides a means of identifying diacritical feasting, an established and prominent aspect of upper status behavior in the late 19th century. Such feasting was expensive in social and economic terms and was largely a part of upper status life. The prevalence of patterns indicative of such feasting should be associated with upper status sites.

VanDeventer - Fountain Site

The VanDeventer-Fountain Site, located on Staten Island New York, was excavated by Louis Berger and Associates in the late 1980s (Morin, Cohen and Friedlander 1990). The project was conducted for the United States Navy as part of compliance with culture resource legislation prior to development of a portion of the Naval Station Staten Island. The site was identified by historic document research and archaeological testing. Phase II testing, in 1985, identified the site as an 18th century farm that was later a summer residence for Henri Mouquin, a wealth restaurant owner and wine importer in the late 19th century (Moran, Cohen and Friedlander 1990: I-4). It is this late 19th century occupation that is of interest here.

The VanDeventer-Fountain house was built about 1713 by John VanDeventer (Moran, Cohen and Friedlander 1990: III-3). The property was reduced in size by out conveyances but the house was still within the family by 1875. Between 1875 and 1885, the house and 3.75 acres of land were bought by Henri Mouquin (Moran, Cohen and Friedlander 1990: III-7; III-17). Mouquin owned the land until 1901, when he sold it to the United States government.

Mouquin was a restaurateur and wine merchant of New York City. When Mouquin arrived in New York City from Paris, in 1854, he worked as a waiter at Delmonico's (Moran, Cohen and Friedlander 1990: III-13). Mouquin had a residence at 79 Leonard Street in New York city as well as his house at

Staten Island. However, he spent considerable time at the VanDeventer-Fountain house (Moran, Cohen and Friedlander 1990: III-15).

Henri Mouquin was born in Switzerland to hotel keepers (Moran, Cohen and Friedlander 1990: III-13). When he opened his own restaurant he had experience behind him. Apparently he also brought some funds, since his first restaurant was opened just two years after he arrived in New York City. Mouquin's restaurant, wine business, and pastry shop did well for in 1933 when he died he had an estate estimated at over \$900,000 (Moran, Cohen and Friedlander 1990: III-13). He was not a millionaire, but he clearly was upper status.

Analysis of the archaeological deposits at the VanDeventer-Fountain house resulted in the segregation of eight depositional units (Moran, Cohen and Friedlander 1990). Depositional Unit 6 was associated with the occupation of Henri Mouquin by mean ceramic date and terminus post quem calculations on ceramics (Moran, Cohen and Friedlander 1990: V-30). Two disparate deposits were identified within this depositional unit. The lower and older deposits (consisting of stratum 13 through 19) were believed to date between 1880 and 1898. The upper portion of the depositional unit is dated from 1898 to 1901 (Moran, Cohen and Friedlander 1990: V-30; v-53).

The lower deposit was richer with better preserved materials. Included among the ceramics were table wares from Utzschneider in Lorraine, France. Some of the pieces were monogrammed. Deposits associated with the late 19th

century occupation of the site include Feature 2 and Feature 5. Feature 5 contained a substantial amount of domestic refuse including faunal remains. These remains were initially analyzed by Cheryl Holt (Moran, Cohen and Friedlander 1990: VI-4). Table 20 presents the basic faunal data from Feature 5 (Morin et al 1990:VI-7). The appendix inventory of materials from the site also indicates that fish remains were present. These were not included in the analysis and reconstruction of the full inventory was not possible. Data presented within the text is not present in the inventory.

Class	N	%
Mammal	1058	32.93
Bird	901	28.04
Fish	619	19.27
Gastropod	2	0.06
Pelecypod	368	11.45
Amp/rept	12	0.37
Ind	253	7.87

Table 20. Class representation in Feature 5, VanDeventer-Fountain House

The inventory shows that 370 shell fish were present in the feature. Two of these were slipper shells, commonly found attached to oysters when harvested. Mammals accounted for most of the remains with 1,058 fragments. Birds were second most common with 901 pieces and fish was third with 619 fragments. There were also 12 reptile remains and 253 fragments that could not be identified to the class level.

Of the seven species of mammals present in the feature, only three are food items. Cats, rats, mouse and unspecified rodent are commonly found on

historic period sites, having been incorporated into the deposits as refuse or trapped.

The three food items are cow, pig, and sheep (Table 21). By bone count, sheep was most common with 108 fragments. Pig was represented by 65 pieces and cow by 42. By weight, however, cow was the most common animal. There were 2,012 grams of cow bone as compared to 573.5 grams of sheep and 543.2 grams of pig.

SPECIES	N	%	Wgt	%
cow	42	11.44	2012.0	64.3
sheep	108	29.43	573.5	18.3
pig	65	17.71	543.2	17.4
cat	3	0.82		
mouse	93	25.34		
rodent	53	14.44		
rat	3	0.82		

Table 21. Species representation in Feature 5, VanDeventer-Fountain House

Bone weight is often considered a more representational measure of meat since there is a biological relationship between bone weight and biomass (Reitz, Quitmyer, Hale, Scudder and Wing 1987). Estimates of meat weight are made from archaeologically derived faunal samples using allometric formulas. By weight, cow accounts for 64.3% of mammalian food bone. Sheep accounts for 18.33% and pig 17.36%. Clearly, cow was the primary meat consumed.

A variety of bird species were identified among the 901 avian bone fragments. Chicken, turkey, pigeon, grouse, goose, duck, and robin were present.

The robin fragments may not have been food, although this is not as clear as, say, rats. Robins were listed as available for sale in the Washington Market (New York Times 12/22/1866). Turkey was the most common bird found, according to bone count, with 93 fragments. Grouse was second with 37 pieces and chicken was a close third with 36. There were 27 goose bones, 11 pigeon bones, and five bones from ducks. There was a total 262.1 grams of bird bones identified to species.

The food use pattern at the VanDeventer-Fountain site, during the occupation of Henri Moquin, is one where large mammals dominated the menu. Cow was the predominant meat. Fowl was commonly served and in variety.

Portion analysis of the large domesticated mammals consumed at the site indicates that meat entered as professionally butchered cuts. Faunal elements identified with butcher cuts (Morin, Cohen and Friedlander 1990) include 9 rib pieces, one scapula cut, one fragment of a proximal humerus, four distal humerus pieces, four vertebrae, one scaphoid, four proximal femur pieces, and two pieces each of distal femurs and distal tibia. These translate into at least three rib cuts, one chuck, five clod, one foot, four shin, and round roast. In terms of *The White House Cook Book*, these are nine third-class cuts and five-fifth class cuts. Premium steaks and roasts are absent.

The overall impression of the VanDeventer-Fountain assemblage from feature five is consistent with the high status pattern seen in *The Table* and *The White House Cook Book*. While large mammal dominates, there is a large

quantity of fowl represented by a variety of wild and domestic species. The butcher cuts of beef are from lower and middle class cuts, not premium cuts. This mimics the pattern of cuts for upper class households identified in the document analysis.

Atlantic Terminal

Archaeological study on block 2006, Brooklyn, yielded information about middle class life in New York City during the late 19th century (Fitts and Yamin 1996; Fitts 1999). This project , Atlantic Terminal, was conducted in the third quarter of 1995 by John Milner Associates, Inc. in response to a request for such work from the Landmarks Preservation Commission and the Department of Housing Preservation and Development. Work was funded by property developers Hudson Residential Services (Fitts and Yamin 1996:1).

The Atlantic Terminal project area did not contain houses until around 1850 (Fitts and Yamin 1996:6). These houses were connected to sewer and water between 1858 and 1868 (Fitts and Yamin 1996:6). The occupants of the buildings were skilled workers, clerical workers, or lawyers placing them within the newly developing middle class (Table 22).

LOT	OCCUPANT	OWN/ RENT	YEARS	OCCUPATION	SER- VANT
385 Cumberland St	John and Frances Culver	owner	1858-1868	clerk/captain	no
385 Cumberland St	Robert and Sarah King	owner	1868-1875	machinist	yes
387 Cumberland St	Thomas Shuster	renter	1860-1866	clerk/merchant	yes
387 Cumberland St	Aaron and Sarah Bates	owner	1866-1885	lawyer	yes
389 Cumberland St	William and Lydia Allen	owner	1863-1866	produce merchant	no
389 Cumberland St	John Atwater	owner	1866-1869	commercial merchant	no
389 Cumberland St	Charles and Winifred Righter	renter/ owner	1869-1880s	importer	yes
391 Cumberland St	Lyman Hopkins	owner	1861-1892	commercial merchant	yes
393 Cumberland St	John Elmendorf	owner	1864-1870	varnish merchant	yes
393 Cumberland St	Eugene Sutton	owner	1870-1895	oil broker/customs clerk	
395 Cumberland St	unknown tenants	renter	1860-1870		
395 Cumberland St	Frederick and Estella Morris	owner	1870-1880s	bookkeeper	yes
442 Carlton Ave	Louisa Holberton	owner	1857-1887	widow	
444 Carlton Ave	George and Mary McGuire	owner	1857-1875	japanner	yes
444 Carlton Ave	William and Mary Kane	renter	1875-187?	watchmaker	no
444 Carlton Ave	John and Sarah Vanderhoff	renter	187?-1887	fishdealer	no
446 Carlton Ave	Gideon and Amelia Powell	owner	1855-1868	clerk/salesman	
446 Carlton Ave	Albert Carter	owner	1868-1869	cashier	
446 Carlton Ave	unknown tenant	renter	1869-1875		
446 Carlton Ave	William Johnson	renter	1875-1881	ships pilot	no
446 Carlton Ave	John Wyatt	renter	1882-1896		
448 Carlton St	Abraham Gray	owner	1854-1863	clothier	yes
448 Carlton Ave	Mortimer and Susan Goff	owner	1863-1865	broker/merchant	
448 Carlton Ave	unknown tenants	renter	1865-1870		
448 Carlton Ave	Ezra Moore	owner	1870-187?	agent	yes
448 Carlton Ave	Edward Moore	renter	1875-1880	clerk	no
448 Carlton Ave	William Kuhud	renter	1880-188?	photographer	
448 Carlton Ave	Andrew Sider	renter	188?	store clerk	
448 Carlton Ave	Samuel Harper	renter	1879-1880		

448 Carlton Ave	William Kuhns	renter	1882-1883		
448 Carlton Ave	John Wyatt	renter	1887		
450 Carlton Ave	Thomas and Ellen Finnan	owner	1851-1856		
450 Carlton Ave	various tenants		1860s		
450 Carlton Ave	Jacob and Julia Draper	owner	1869-1900s	bookkeeper/cashier	yes
452 Carlton Ave	Isiah Uffendill	owner	1859-1864	salesman	
452 Carlton Ave	various tenants		1864-1892	horse dealer/butcher	

Table 22. Occupants of lots at Atlantic Terminal (After Fitts and Yamin 1996).

From Table 22, it is possible to see that the people living in this area were well employed in positions above menial work. Even the tenants in these houses had fair jobs. The people that moved into these houses were young families of mostly American descent (Fitts and Yamin 1996:28).

The Atlantic Terminal report examines the relationship between the middle class status of the site occupants with the material culture found at the sites. Faunal remains were given only a cursory examination “due to contractual limitations” (Fitts and Yamin 1996).

Seven large features, privies and cisterns, were completely excavated during the course of this project. These are Features A, B, C, F, G, H, and O. Historic background research, and the materials within the features, allowed the deposits to be associated with individual households in most cases. Faunal remains from two of these features were analyzed; feature B and Feature C.

At 387 Cumberland Street, Feature C was encountered. This feature is believed to have been filled by the family of Aaron Bates between 1865 and 1885. Feature B, located at 389 Cumberland Street, is attributed to the household of John Atwater between 1866 and 1869.

Analysis of these faunal remains included the calculation of Minimum Numbers of Individual (MNI) and Numbers of Identified Specimens (NISP). These measures were used to estimate relative representation of the various species. Unfortunately, bone weight was not. Animal remains within the features were compared by class of animal and the representation of meat cuts of the large domesticates was examined. Another means of estimating meat abundance was the minimum number of meat cuts.

Feature C: 387 Cumberland Street

The materials from 387 Cumberland Street were associated with the occupation of the Bates family. Aaron Bates was a lawyer, and along with his wife, they had four children. Bates also served as a captain in the Union Army during the Civil War (Kitts 1999:43).

There were 419 bone fragments recovered from Feature C. Looking at the number of identified specimens by class, 76.4% of the assemblage was domesticated large mammals. Birds were represented by 16% of the assemblage and fish accounted for the remaining 7.4%. Comparison of the NISP between the three large domesticates shows 74 fragments of sheep, 52 cow fragments, and 50 pieces of pig. Interpretations in the report (Fitts and Yamin 1996:54) assume

that MNI is equitable with meat representation and states that mutton and lamb make up 50% of the meat within the assemblage. This disregards all work on allometric scaling that would account for the greater amount of meat available from few bones of cows which are considerably larger than sheep.

Analysis of meat cuts shows four peaks of representation. Leg of lamb (fore and hind), shanks of pig and sheep, and beef round are responsible for these peaks. Lesser cuts include pork leg, beef chuck and foreshank. According to the price lists from Washington Market, these cuts are lower to middle priced cuts.

Other meat consumed by the Bates's include fish and birds. There were at least two cod, two porgies, and one each of striped bass and sea bass. Birds were represented by at least two chickens, and one each of goose, turkey, and duck. Clams and oysters were also present with clams being represented in greater amounts.

Feature B: 389 Cumberland Street

At 389 Cumberland Street, four features were found associated with the occupation of John Atwater and family. The Atwater's, like the Bates family, had four children. Atwater was a commercial merchant.

Faunal material from Feature B was analyzed. There were 455 bone fragments and included commensal animals such as rat and cat. Of the 455 bone fragments, 46 were from cow, 28 from sheep, and 83 from pig. These numbers and calculated MNI are interpreted in the report as showing a greater use of pig than either cow or sheep by the Atwater family. However, the MNI numbers are

not provided and there are comments about many bones belonging to a single suckling pig.

Besides the large domesticated mammals, birds comprised a sizeable portion of the diet. There were 96 bird bones including two from duck, 11 turkey, and 27 chicken. Also present were three fish bones.

Analysis of meat cuts shows a large percentage of more expensive cuts (Fitts and Yamin 1996:65). The greatest number of cuts being beef round, ham, and leg of mutton.

Re-analysis of Feature C

Because bone weight was not reported, calculations of biomass or meat weight could not be made. Minimum numbers of individuals is seen as a meaningless measure in urban faunal assemblages where large domesticates were marketed in pieces. It is possible, with the data at hand, to calculate animal representation by class and species by NISP (Table 23). It is also possible to re-calculate meat cuts according to the butcher charts for the day.

CLASS	N	%
mammal	319	76.5
bird	67	16.0
fish	31	7.4

Table 23. Animals by class in Feature C, Atlantic Terminal

The amount of large mammal and bird in this assemblage falls between the values seen in *The White House Cook Book* and *Practical Housekeeping*. *Practical housekeeping* is believed to be a middle class text while *The White*

House Cook Book is thought to be a higher class household. These works are, however, not of the status represented in *The Table*. The interpretation of this assemblage, then is that it represents a middle class to upper class household. When compared to the VanDeventer-Fountain site, we see that there is far more large mammal and less fowl. This result is expected since Moquin was among the wealthiest set of people.

The enumeration of Feature C cow parts (Kitts and Yamin 1996:AppendixIV) was used to calculate the number of different cuts of meat according to *The Table* in *The White House Cook Book*. Since the data are not detailed enough to determine which bones may have articulated, it was assumed that each represented a separate animal or cut. There appear to be four cuts from the area used for choice roasts and steaks, two cuts from the better round portion or round and two from the mouse-round. Eight fragments were from the shoulder, one from the clod, and six from shin cuts.

The types of cuts present appear to be better roasts and steaks and soup cuts (Table 24). There were four cuts each from the first and second quality meats, nine third-place cuts, one from fourth-class meats, and six fifth-class cuts. Menu analysis suggests that this would be a pattern in keeping with a better-off individual. The soup cuts likely result from the soups served in multi-course meals with the steaks and roasts forming the main course.

QUANTITY	CUT #	CLASS	CUT NAME
4	1	1	choice roast
4	4	2	round
1	5	3	round
1	6	5	shin
8	14	3	shoulder
1	15	4	clod
5	17	5	shin

Table 24. Beef cuts from Feature C, Atlantic Terminal

The relative representation of different classes of meat, the proportion of pig and bird, and the analysis of meat cuts leads to the conclusion that the assemblage represents a household of middle class status. This interpretation is in keeping with the conclusions of the authors based on documentary research and analysis of ceramic and glass artifacts from this site.

The Atwater family was clearly not of the same means as Henry Moquin. Moquin's assemblage included far more bird and less large mammal than the Bates assemblage. The percentage of steaks and roasts to soups provides a mixed message. Calculations of meat from the feature, compared to that taken from the cookbooks, provides evidence of less feasting placing the Bates assemblage within the middle class as well.

Re-analysis of Feature B

All of the comments made about the analysis of Feature C are applicable to Feature B. Because bone weight was not reported, calculations of biomass or meat weight could not be made. Minimum numbers of individuals is seen as a meaningless measure in urban faunal assemblages where large domesticates

were marketed in pieces. It is possible, with the data at hand, to calculate animal representation by class (Table 25) and species by NISP. It is also possible to re-calculate meat cuts according to the butcher charts for the day.

CLASS	N	%
mammal	246	64.3
bird	112	29.3
fish	24	0.6

Table 25. Class representation from Feature B, Atlantic Terminal

The representation of bird to large mammal (Table 25) in this assemblage appears to be that of an affluent household. The percentages fall between those in *The Table*, the highest status cookbook, and *Practical Housekeeping*, a middle class text. This pattern appears to fit within a middle class to upper class status.

Beef cuts from all five classes identified in *The White House Cook Book* were present (Table 26). There are two from first-class cuts, seven from second-class, 15 from third class, five from fourth class, and eight from fifth class. The lower class cuts fit the pattern of soup courses but the main courses are not prime cuts of beef. The quantity of fowl identified at this site provides an alternative main course; birds. This, too, is consistent with an upper middle class household.

The Bates family appears to have enjoyed a prosperous life. Interpretations of the social/economic status, based on overall patterns of artifacts and documents, is that of middle class (Kitts and Yamin 1996). The re-analysis of the faunal materials from feature B conforms to that conclusion. The

quantity of fowl and the apparent multi-course meal taking suggested by the quantity of soup bones is in keeping with that status.

When compared to the Atwater household (Feature C), the Bates household appears to have spent more on food producing more evidence of feasting. Atwater was a commercial merchant, Bates was a lawyer. Bates was wealthy enough to hire servants, Atwater was not. In 1870, Aaron Bate's real estate was valued at \$3400 while Atwater's was \$1,000 (Fitts 1999:44). Thus the relative ranking [of wealth] of these two assemblages, as interpreted from the faunal remains, seems to be verified by archival information.

QUANTITY	CUT #	CLASS	CUT NAME
2	1	1	choice roast
4	10	2	fore rib
4	3	3	aitch bone
3	4	2	round
8	5	3	mouse round
4	6	5	shin
3	14	3	shoulder
5	15	4	neck
4	17	5	shin

Table 26. Beef cuts from Feature B, Atlantic Terminal

The analysis of faunal material conducted here appears to be in full agreement with interpretations presented by Fitts (1999). The presence of gothic-style dining sets, porcelain table wares, and the very location of the sites, speak for the middle class status of these sites (Fitts 1999), as do the bird and soup bones.

Five Points

The Five Points area is notorious as a slum that began as a middle class neighborhood in the early 19th century (Burnes and Sanders 1999:77). By the late 19th century the area was overcrowded and was occupied by multi-ethnic immigrants. Archaeological work conducted in 1992, by John Milner and Associates, recovered materials dating from the early to late 19th century. Much of this material predates the period for this study.

Two features from the Five Points excavation are dated to the 1860s and within the time period of this study: Lot 45, Feature H, and Lot 6 Feature J (Milne and Crabtree nd). Lot 7, Feature O was also dated to the 1860s, but because there was a saloon on the property at that time of deposition the feature was excluded. Restaurant food remains are not expected to represent a full subsistence pattern as domestic remains do. By the 1860s the Five Points area had become home to working class people including many immigrants.

Feature H

Feature H was stratified. The lower deposit contained 3,538 bone fragments dating to the 1860s. During this period, a tenement building was present at the site. Polish, German, and Italian immigrants occupied the tenement (Milne and Crabtree nd: 181). The upper deposit of Feature H produced a *terminus post quem* of 1880. This level was interpreted as “entirely commercial in nature” (Milne and Crabtree nd: 181).

From the lower deposit of Feature H, 3,538 bone fragments were recovered. Mammals comprised 38.3% of that total (Table 27). Fish was most common by bone count with 55.26% and bird contributed 6.25%. Large domesticated mammals provide only 65.3% of the mammal remains, the rest being small mammals including rats and cats.

CLASS	N	%
Large mammal	406	11.47
Small mammal	216	6.1
unidentified mammal	732	20.69
Bird	221	6.25
Fish	1955	55.26
Reptile	8	.23

Table 27. Class representation in Feature H lower deposit.

Table 27 shows that fish was a significant part of the diet. This number is somewhat misleading in that the numerous fish bones represent a relatively small amount of meat when compared to any of the large mammals or even birds. However, there were at least 18 different species of fish represented. Birds accounted for 6.25% of the assemblage and large domesticated mammals 11.27%.

Examination of the major domestic mammals shows that pork played a large part in the diet of the tenement occupants (Table 28). By bone count, pig exceeded all other meat types. The number of meat cuts, calculated by Milne and Crabtree (nd 184) shows more beef cuts but a nearly equal number of pork.

MEAT	N	%	MNI	%	# MEAT CUTS	%
Cow	71	26.69	1	20.00	13	37.3
Pig	116	43.61	2	40.00	11.2	31.9
Sheep/Goat	79	29.70	2	40.00	10.8	30.8

Table 28. Domestic large mammal remains by number, MNI, and number of meat cuts in Feature H lower deposit.

Bird remains from this feature include chicken, turkey, duck and goose. Chicken was the most common. Referring back to the representation by class (Table 27), it is clear that birds were not a major part of the diet.

Beef cut analysis shows that arm and round steaks were most common (Milne and Crabtree nd 186) being 8.5% of all meat cuts each. Foreshank represented 4% of the meat cuts and sirloin steak another 3.5%. This pattern shows a use of moderate priced steaks and roasts as well as lower cost soup elements and more expensive pieces.

The faunal remains from Feature H fall outside the parameters of an upper, or even middle class diet, as defined by the menu analysis. Pork remains were substantially more common in this assemblage than the other sites examined or the menu study. Also, the amount of bird was reduced. Beef cuts show a predisposition towards medium priced steaks and roasts with some inclusion of expensive and cheap cuts. This feature lacks the proportion of both high cost meats and soup bones seen in the high class assemblage as represented by *The Table* and middle class assemblages like those from Atlantic Terminal.

Feature J

Two layers within feature J contained faunal remains dating to the 1860s (Milne and Crabtree nd 188). The lower deposit contained 9,590 bones while the upper layer yielded another 9,310. The deposits were left by occupants of a tenement that occupied the site (Milne and Crabtree nd:188).

In the lower deposit birds accounted for five% of the assemblage by number of bones, fish 21%, and mammals 72%. Cats, rats, and dogs made up 10% of the mammal bones, leaving the rest as domesticated mammals. In the upper level, birds comprised four% of the assemblage by number. Fish was 10% and mammals 86% (Milne and Crabtree nd 189).

In both layers, pig bones outnumbered other large mammals (Table 29). The vast difference in the numbers by species establishes the dominance of pork in the diet of these tenement dwellers. The minimum number of meat cuts calculated by Milne and Crabtree (1996: 190) reinforces this conclusion (Table 30). Meat cut analysis from the two features shows that arm and round steaks were the most common beef cuts (Table 30). Hindshank was the third most common, followed by sirloin steak (Milne and Crabtree 1996: 191). Overall, the two most common cuts were pigs feet and pork shank cuts. Beef arm steak was the third most common cut overall.

	LOWER LAYER		UPPER LAYER	
	N	%	N	%
Cow	394	20.7	192	14.3
Pig	998	52.4	921	68.7
Sheep	511	26.9	228	17

Table 29. Representation of large mammals in Feature J.

	Lower Level		Upper Level	
	# Meat Cuts	%	# Meat Cuts	%
Cow	64.8	28	33.6	28
Pig	104	44.9	62.8	52.3
Sheep	62.9	27.1	23.7	19.7

Table 30. Representation of Meat Cuts by species in Feature J.

Interpretation of the faunal data from Feature H, based on the menu study, clearly indicates a lower class assemblage as identified in the text analysis. The large amount of pork and the low amount of fowl are critical markers. Beef cut analysis also indicates a lower status but less clearly than the pork and bird representation.

Interpretation

The menu analysis presented earlier provides a clear picture of what an upper class diet should be like. What it lacks is a clear impression of lower class eating. The dietary studies by Delaney partly filled that gap. But in Delaney's study, beef was seen as the most commonly consumed meat. Pork was well represented and was seen as greater than the amounts seen in the menus. It

was not, however, as well represented as that seen in the features from Five Points. Mutton was also not as well represented in the Delany studies as it was in the Five Points site. Part of this discrepancy may be due to different scales of measurement. Delaney relied on weight while the Five Points study used numbers of bones and meat cut estimates.

The Five Points faunal material also provides clear evidence that lower status people consumed fewer birds of all types than those of the upper class, substantiating the menu analysis. In general, a diet with little bird and lots of red meat - beef, pork, mutton - with a relatively high amount of pork, as shown here can be used to define a low status pattern.

Meat cut analysis can also add to the image of a low status diet. At Five Points, middle quality beef steaks were common representing the greatest number of beef cuts. Some soup and more expensive steaks were also present. This is in contrast to the pattern seen for upper class households through both the menu analysis and the analysis of archaeological materials from the VanDeventer-Fountain site and Atlantic Terminal.

Overall, a status based pattern of meat use appears to be evident. In the next chapter, the menu analysis, dietary studies, butchering cut information, and site studies are brought together. Conclusions are made about the correlation of status and particular meat use patterns.

CHAPTER 9: CONCLUSIONS

This research is an original study of late 19th century menus from cookbooks as well as other documents of the period to better understand the nature of historic period faunal remains. While not offering any new means of quantifying remains or chemical study, this work does provide a new understanding of the relationships between meat types and what these relationships mean. This understanding is achieved, at least in part, through the concept of diacritical feasts, a recognized social feature of late 19th century upper class society.

Rather than addressing the issue of meat use variation through direct site comparison, this work uses specific texts as a means of understanding this variation. Menus were chosen for this work because they include calendrically structured meals that provide emic representations of the way people should eat in the mind of 19th century cooks. The variations in meals is between special days, that is feasts, and regular days is clearly seen in the menus. Also, because cookbooks were written for those who could afford to buy books and afford an education to read them, there is structure along economic lines.

The concept of the feast plays an important role in understanding the way faunal remains can be used to examine social status. It is the feast that helped mark the upper class from others with their special foods, dishes, settings, and manners. There are, then, material aspects of feasts that can be identified in the archaeological record. These material remains can then be used as a means of

accessing status. While this work focuses on faunal remains, ceramics and other materials can be examined (Fitts 1999).

To accomplish the goals of this research, a variety of issues were involved. Because of the temporal and geographic variability of social life, a context for this research needed to be established. The urban setting of the late 19th century was the targeted social situation for this study. New York City, as the biggest and perhaps earliest true urban environment in the United States, was used as the prototype. The context of this setting was developed.

The analysis of menus from cookbooks in this study is based on anthropological theory, particularly drawing on work that addresses specific patterns of feasting. This was then expressed in a form familiar to faunal analysts. This knowledge was then applied to reported faunal samples from New York City to test the validity of the analysis.

The results of the menu analysis, coupled with other material gathered from late 19th century texts about meat marketing and use provide important guides for the analysis of historic period faunal remains. Some presentisms and archaeological myths - interpretations developed from earlier printed suppositions - are exposed. Aspects of faunal assemblages that have meaning when compared to other aspects have been identified. Some weaknesses in the standards of faunal analysis are identified.

Arguably the most significant development in the study of historic period faunal assemblages was the introduction of the concept of meat cuts. Rather

than looking at the remains of large domestic animals as whole animals, the particular cuts that might be purchased from a butcher became a data set. Added to the analytical units of NISP and MNI was the names and numbers of meat cuts.

Historic texts identify the fact that the division of animals into cuts varied in details from region to region and through time. This fact has been little realized or addressed in archaeological work. The rise of national meat processing plants removed some animal portions from the retail markets. Many of the head, foot, and internal parts once routinely sold in retail markets were diverted to sausage processors. This change was not instantaneous, universal, or complete, but by the 20th century cow heads and feet were less available than before. This change in marketing is reflected in archaeological deposits.

Two basic assumptions about the various cuts of beef and their social value developed as the concept of meat cuts came into use in archaeology. First, expressed by Otto (1980), was that soups were lower class food. The second concept, drawn from prehistoric archaeology, and related to the first assumption, was that the portions of an animal with a greater meat to bone ratio are more valued. This seems to be borne out by price lists that show meatier cuts as more expensive.

These assumptions were used in attempts to show social status variation within faunal assemblages. It is not surprising, in light of the use patterns

shown in this research, that the interpretations from these studies often produced less than satisfactory results.

An important aspect to wealth and social status during the late 19th century was the middle class. Like the super rich at the top of the scale, the middle class could afford luxuries. The separation of this group from the working poor or working class below them and the super rich above is a matter of scale. Even the working people in the Manhattan tenements could afford more than the basics of life. They had rugs, furniture and suits of clothing.

The wealth of the upper status bought power and material goods that were beyond the lower class means. The genteel rituals of the old social elite were co-opted by the new elite and changed. Some were abandoned, some were perverted by excess. The feasts of the upper class were labeled conspicuous consumption by Veblen (1998). These feasts easily fit into the definition of diacritical feasts defined by Hayden (1996) and Dietler (2001). As such these feasts, with their special foods, dishes, and manners, were a means of reinforcing status levels.

The middle class sought to mimic these displays. The rules for this exalted behavior were printed in books and newspapers and taught in social settings. With its multiple courses the social dinner requiring servants, sets of dishes, a formal dining room, and proscribed behavior, was a prominent feature of social identification. Even at home with the family, meal structure could reinforce a self awareness of the social position.

While the rules of how to serve a meal, down to minute details such as the style of dishes that should be used, are explicit in the household directories, the rules of what meats to serve are not. The types of meats served are clearly seen in menus, and even the proper time during the meal that different meats are served is presented. The rules, however, are not explicit.

Rather than attempt to make approximate statements of these rules, this work seeks to define the patterns resulting from those rules and to see how adherence to these rules varied according to social status. Anthropological research by Mary Douglas and others shows that patterns are discernable along calendrical lines. Some meals take on special character and meaning being either holidays that are calendrical (Christmas, Easter, etc), or more celebratory and personal (i.e. birthdays, communion feasts). These special meals take on a more complex structure (Douglas 1975,1984; Curtis and Theophano 1984; Gross 1984).

Holiday meals, by definition of greater social value than regular days, provide a contrast to everyday foods. This comparison established the basic scaling of different meats. The comparison of holiday and non-holiday meals was done with a concern for identifying differences that could be detected in archaeological deposits. While the full structure of the meals cannot be seen in an archaeological site, bones from the meats used in the various dishes represent that structure. Because of expense and a perceived need for social display among the upper class, and to a lesser degree the middle class, more ritualized dining

was common among them than in the lower class households. Even among the upper class, simple meals occurred although people may tend to eat to their status even when alone in order to reinforce their own image of their status. Thus household status should be definable among the faunal remains archaeologists recover.

Based on the analysis of menus and the other documents, and supported by analysis of archaeological faunal deposits, analysts seeking to investigate social status, via late 19th century urban faunal deposits, should consider the following critical measures:

- representation of meats by class (large mammal, bird, fish, etc)
- representation of various cuts of meat, especially beef
- representation of fowl (wild and domestic) in relation to the amount of pork

It is the opinion here that all comparisons should be made on biomass or meat weight estimates. Bone weight by NISP (number of identified specimens) does provide a crude approximation of biomass or meat weight. NISP is a poor choice for comparisons because of the biological differences between various animal classes. A single cow phalange can weigh more than a chicken pelvis and provide far less meat. MNI (minimum numbers of individuals) provides dubious information since meat cuts and not whole meats are brought into urban sites, at least in regards to the large domestic animals that comprise the bulk of the

faunal assemblages. There is more value to these when comparing fish and birds which likely were brought to the site whole or mostly whole.

Meat Class

A critical aspect of faunal assemblages that must be examined to assess social status is the various representation of the different classes of meat; mammal, bird, fish, etc. The relative percent of fowl to large mammals is a key measure.

In all four sets of menus, the most significant changes between holiday meals and non-holiday meals was seen in the representation of birds and large mammals. Also, the poor working people included in Delaney's study consumed little bird. The better off in those studies, like the occupant landlord, consumed noticeably more fowl. In the archaeological samples examined, fowl was clearly a part of the middle class and upper class diet. The Bates family assemblage contained 16% fowl and the Atwater assemblage had 29.3%. Henri Moquin's assemblage contained 30% bird bone by count and 11% by weight (Morin, Cohen and Friedlander 1990:VI-37) and the lower class tenements at Five Points had around five% bird.

In both the menus and in the archaeological sites, the amount of bird correlates with status. With the price of chickens being as much as the most expensive beef this makes economic sense. There also seems to be an underlying image of fowl as more impressive than beef. The holiday meals and special

occasions call for a bird. Even today, fowl is more often served at special events than is beef. And pork is not usually served, except maybe as a ham.

The relationship of fish to other classes of animals is unclear. There appeared no clear correlations between fish and large mammals or birds. Further examination of types of fishes found on sites of differing status may prove informative.

Meat Cuts

Meat cuts, particularly beef cuts, have been used as an analytical category by archaeologists for the last 20 years. Status examination based on meat cuts was based on an assumption that the wealthier households would consume a greater proportion of more expensive meat cuts (Schultz and Gust 1983). The menu analysis, however, has shown that meat use is more complicated and that price is not the most important aspect in meat selection and use.

Wealthier households have more richly structured meals and feasts that require a greater number of lesser quality meats (for soups). Wealthier household status would be underestimated by traditional beef cut analysis because of the amount of soup bones that would be found. Lower class and working class families, eating more simply structured meals, ate apparently fewer soups. This statement contradicts the assumption stated in some reports that soups are a lower class food. The status of lower class households, because of the relative lack of soup bones and greater proportion of chops and roasts, would be overestimated.

Examples presented above include sites from New York City. Faunal material from the VanDeventer-Fountain site included at least three rib cuts, one chuck, five clod, one foot, four shin, and round roast were identified but no premium steaks. There is no doubt that the VanDeventer-Fountain site was the product of a high status household: one that consumed poor quality cuts of beef. Meat cuts in these assemblages from the Five Points are largely middle priced and higher priced cuts.

Fowl versus pork

An important comparison for status estimates in the cookbooks and faunal assemblages is the ratio of fowl to pork. Counter-intuitive in today's thinking is the fact that fowl of all types were expensive. This expense is no doubt related to technological limits of fowl production and marketing. At the same time, menu analysis provides clear evidence that fowl was more prized than other meats by the greater occurrence of fowl on holiday meals. The relative quantity of fowl, including domestic and wild, is a better measure of status and wealth than beef cut analysis as proposed by Schultz and Gust (1983); at least in late 19th century New York City.

In the menu analysis it was concluded that greater use of fowl was indicative of higher status households. The food lists compiled by Delaney do nothing to negate that conclusion. In fact, the very low percentage of fowl, and the absence of all birds except chicken, tend to substantiate the correlation between status and fowl representation. Information gathered from price lists

show that chickens were not cheap. In fact, better chicken (i.e. higher priced) was more expensive than better cuts of beef.

The United States Department of Agriculture listed statistics of various sorts in their annual yearbooks and bulletins. The Manhattan Park Poultry Ranch sold broilers in the city during the spring at \$1 a piece (Bureau of Animal Husbandry 1893:309). Roasters four months old would weigh up to about six pounds each and sell for forty cents a pound (Bureau of Animal Husbandry 1893:315).

In the 1899, Yearbook statistics on egg prices in various cities were listed. Between 1895 and 1899, wholesale chicken egg prices varied from 9.5 cents per dozen to 34 cents a dozen. In 1861, the average price of a dozen eggs was 18 cents (Ralph 1861:301). There was seasonal variation shown in these lists with the lows appearing in the spring and highs in winter. The prices also show variation for quality (USDA 1900:812). When considering the numbers of eggs produced under proper conditions, the value of chickens can be more fully appreciated. An 1893 report lists one farmer with 650 hens as producing 200 to 350 eggs daily (Bureau of Animal Husbandry 1893:332). Using these averages, each chicken produced about \$3.50 worth of eggs each year or roughly seven times the cost of a bird at market. A pair of one and a quarter pound broilers would bring about a dollar in the New York market (Bureau of Animal Husbandry 1893:333).

In comparing the information of these reports with the prices of meats printed in newspapers we can better understand the value of chickens. Chicken sold for about the same price per pound as hams and better quality cuts of beef. At some times of the year chicken was more expensive than ham, sirloin steak, or veal. Eggs, commanding an average of 22 cents a dozen through the year, are also expensive when compared to meat. For the same 22 cents a person could buy a pound of bacon, a porter house steak (almost) or more than a pound of the lesser cuts of beef and pork. By any measure, chicken and eggs were among the more expensive food items during the late 19th century.

The decrease in the relative price of fowl, during the 20th century, can be related to improved understanding of avian biology, bacteriology, transportation, and refrigeration. Larger numbers of chickens could be raised with less loss, transported further and faster, and kept longer.

When the relative percent of fowl, including wild and domestic types, is compared to the amount of pork a critical measure for status determination is revealed. As related above, pork seems to have been consumed by lower status households more than by the upper class. Pork and pig products appear little or not at all during holiday meals in the better cookbooks. The lower class people studied by Delaney consumed pork with regularity and in greater quantity than indicated in the middle and upper class menus. The heavy use of pork by the lower class is also seen in the remains from the Five Points tenements.

A scaling of site occupant status can be achieved by dividing the percent of chicken by the percentage of pork. Ideally, these calculations should be done with biomass estimates. The higher the result the higher the relative economic status of the site or feature. Calculated fowl/pork measures from the cookbooks are: *The Table* 3.63, *The White House Cook Book* 1.56, *Practical Housekeeping* 1.35, *Imperial Cook Book* .35. Arranging these by this scale *The Table* has the highest rank followed by *The White House Cook Book* (Figure 30). *Practical Housekeeping* is third and the lowest ranked is the *Imperial Cook Book*. This is the same basic ranking of cookbooks identified by the intended audience of the works. Among the archaeological sites investigated, Fountain-Moquin site had



Figure 30. Comparison of chicken and pork from menus on holidays and non-holidays

a rank of 13.86. At Atlantic Terminal Feature B had a value of 1.45 and Feature C a value of 1.34. Feature H from Five Points produced a value of 1.14 and Feature J yielded a value of .46. Clearly the VanDeventer-Fountain site represents the wealthier site. The close values of the two features from Atlantic Terminal indicate the relative closeness of the status from these two neighbors. A ratio of 1.14 from Five Points Feature H may be due to the presence of shop owners living at their stores. No business was noted for the lot Feature J was located on and the tenements there ate relatively little bird.

Additional observations

Some comments are needed about dividing faunal assemblages between wild and domestic animals and making interpretations. There is an intrinsic problem with organizing faunal remains into wild and domestic categories. Fish are all wild and the large mammals that make up the bulk of the assemblages are overwhelmingly domestic. Medium and small mammals are mostly wild. Birds are both wild and domestic. While there are valid reasons for considering the various percentages of wild game to domestic meats, there are times when this distinction needs to be overlooked. For example, sorting wild birds from domestic birds may be inappropriate given the apparent interchangeability of bird species in the higher status meals.

On the surface, however, it does seem that greater variability is related to wealth and status in that both *The Table* and Henri Moquin's faunal assemblage contain the greatest variety of meats. However, the features from Five Points

also had a large amount of wild animals, primarily fish. Some varieties of fish were inexpensive and some households consumed fish more regular than others. The tenement dwellers at Five Points consumed a fair amount of cheap fish.

A few additional comments of meat cut analysis are appropriate. Imposing modern butcher cuts into the past can mask and mislead analysts. There was regional variation in butchering methods and these changed through time. Understanding these changes should be one of the goals of faunal analysis.

The variation in rib cuts needs to be examined since rib cuts vary in quality and cost. Also, automatically assuming that the presence of head and foot elements on sites denotes on-site animal raising and /or butchering is erroneous. Cow and pig heads and feet could be purchased at the markets. Fowl may have been purchased live. Even dead they could be purchased whole. This would have been more true early in the study period due to the lack of refrigeration.

The use of estimates of the numbers of meat cuts itself needs to be critically examined. Some cuts contain multiple bones or parts of many bones. Would three pig phalanges be one foot or three feet? Can the bones be articulated to prove this one way or the other? These same questions are valid for rib fragments. Are the four rib bones a rib roast or four chops? These questions have not been adequately addressed by faunal analysts.

Research Contributions

Making assessments of the household status from faunal remains requires that the relative representation of the different classes and species of animals be calculated. Identification of meat cuts must also be conducted. Various combinations of these aspects of the assemblage will point towards a social status. The major contribution of this research is to elucidate these patterns.

High status sites will contain the greatest percentage of fowl, including domestic and wild varieties. Variety may be present or species may be limited to chicken and turkey. In conjunction with the quantity of fowl will be a wide variety of beef cuts including a fair number of head and feet elements.

A middle class household will have a faunal assemblage that contains a modest amount of fowl. Beef cuts will be weighted towards the better cuts but some feet and head elements will be present. This assemblage will look similar to the high status but with a smaller amount of fowl, perhaps more pork, and a higher proportion of steaks and roasts to soup portions.

Low status sites will have a small amount of fowl. Pork will be prevalent but beef will dominate the assemblage. Beef cuts will mostly include a mix of chops, roasts, and steaks. Middle priced steaks will be most common but some high priced steaks and cheap soup cuts are expected.

This being said, provisions must be made for sites that do not conform to these criteria. A different pattern of faunal remains has been identified for African-American faunal assemblages (Warner 1998). This pattern is high in chicken and pork remains, probably being a historical pattern related to slave

diet. Jewish households strictly adhering to their dietary laws will have no pork, regardless of the social status. Variance from the pattern of social status placement can be more telling of the site inhabitants than conformity.

The faunal patterns identified here are different from those from the early 19th century and earlier times and from the early 20th century to the present. Historical trends exist, however, and the meal patterns that resulted in the defined faunal assemblages are rooted in earlier forms of meal taking and, in turn, were transformed to form later patterns. Through the concept of feasting as used in this study it may be possible to discern the continuity and variance between late 18th century to the late 19th century status patterns of faunal remains.

The comparison of the Calvert House and Jonas Green faunal assemblages from Annapolis, Maryland (Lev-Tov 1998) shows variation along the lines identified in this study. Calvert house, an acknowledged high status household produced a faunal assemblage that contained 15.73% fowl and 1.18% pig. Jonas Green, a household that was at least middle class (Lev-Tov 1998:123) had a faunal assemblage with 14.63% fowl and 1.43% pig. Beef soup cuts, including head and feet, were more common at the Calvert House than in the Jonas Green site. Based on this comparison, there seems to be historical precedent for the social status based pattern identified in the cookbooks. The higher status household had a higher percentage of chicken to pig and the pattern of beef cuts

including a greater frequency of soup bones. Caution should be used, however, before applying this work to other time periods and non-urban settings.

Other contributions of this research have been to expose some common misconceptions that appear in faunal analyses. The cost of chickens and other birds was greater than most other foods. The idea of cheap chickens living in everyone's back yard needs to be critically examined. Also, the statement that finding heads and feet of animals on a site is evidence that the animals were raised there has been debunked. Animal heads or animals with heads could be purchased in the markets.

Greater care needs to be given to butcher cut analysis. The method of butchering varied across time and space. All butchering was not done in the manner provided by modern butchering guides. The definition of regional and temporal butchering patterns should be a goal of faunal analysts.

In no way has the research potential of cookbooks and servants directories been exhausted. The ordering of chapters may have value in understanding ideas about food. An increase in dessert entries through time seems to exist, possibly related to the decrease in the cost of eggs and sugar through time. Data on home remedies and household chemistry are sometimes included in cookbooks. All of these have the potential to reveal interesting aspects of past lives and should be addressed in future studies.

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APPENDIX I: FEATURES OF CITED COOK BOOKS

	The Table	White House Cook Book	Practical Housekeeping	Imperial Cook Book	Housewife's Library	Common Sense	Cook's Guide	Epicurean	Compendium of Cookery
date	1891	1887	1890	1890	1883	1884	1900	1893	1890
menus	yes	yes	yes	yes	no	no	no	yes	no
calendrical menus	yes	yes	yes	yes	no	no	no	no	no
butcher charts	no	yes	yes	yes	yes	no	no	no	no
carving	yes	yes	yes	yes	yes	no	no	no	no
recipes	yes	yes	yes	yes	yes	yes	yes	yes	yes
marketing	yes	yes	no	no	no	no	no	no	yes
household hints	no	yes	yes	yes	yes	yes	no	no	yes
dinner giving	yes	yes	no	yes	yes	no	no	yes	no
etiquette	no	yes	no	no	yes	no	no	no	no
seasonal foods	yes	yes	yes	yes	no	no	no	no	no
health	no	yes	yes	yes	yes	yes	no	no	no
home decoration	no	no	no	no	yes	no	no	no	no

	Miss Parloa's	Peterson's	Every-Day Cook-Book	Practical Cooking	Mrs. Porter's	Fannie Farmer	Philadelphia	Successful Housekeeper	Century Cook Book
date	1880	1864	1884	1877	1891	1896	1886	1882	1895
menus	yes	no	no	yes	no	yes	yes	yes	no
calendrical menus	no	no	no	no	no	no	no	no	no
butcher charts	yes	no	no	no	no	no	no	no	no
carving	no	no	no	no	no	no	no	no	no
recipes	yes	yes	yes	yes	yes	yes	yes	yes	yes
marketing	yes	yes	yes	no	no	no	no	no	no
household hints	yes	yes	yes	no	yes	yes	no	yes	yes
dinner giving	no	yes	no	yes	yes	no	yes	yes	yes
etiquette	no	no	no	yes	no	no	no	yes	yes
seasonal foods	yes	no	no	no	no	no	no	no	no
health	no	yes	yes	no	yes	no	no	yes	no
home decoration	no	no	no	no	no	no	no	yes	no

APPENDIX II: MENU DATA

Table Key

Meal: B=breakfast

D=dinner

S=supper

L=lunch

Class: F=fish

M=mammal

G=game

B=bird

E=egg

APPENDIX III: DATA FROM ATWATER AND WOODS 1898 AND ATWATER
AND BRYANT 1899

REFERENCE NUMBER	OCCUPATION	ETHNICITY	NUMBER OF PEOPLE	WEEKLY INCOME
30	mechanic	irish/english	5	\$12.50
31	carpenter	german	5	\$15.00
32	jeweler	german	7	\$30.00
33	sailor	english/scotch	6	\$15.00
34	watchman	german/irish	9	\$14.00
35	carpet dyer	irish	14	
37	carver	german	7	\$15.00
38	sailor	german	8	\$28.00
47	truckman	irish	7	
48	sewing woman	german	6	
51	shopkeeper	irish/american	6	\$15.00
155	longshoreman	irish	7	\$8.00
158	plumber	american	7	\$9.00
159	washerwoman	english	9	
160	truckman	american	5	\$14.00
162	longshoreman	german/scotch	5	\$28.00
167	carpenter	german	6	\$10.00
168	housekeeper	irish	5	\$21.50
170	caretaker		5	\$11.50
171	tanner		7	\$13.00
172	foundryman		9	\$10.00
177	truckman		6	
178	longshoreman		8	
183	sail rigger	irish	5	
185	laborer		6	
186	fruit vendor	italian	6	
188	bookbinder		10	\$17.00
192	butcher	irish	2	\$11.00
193	sail rigger	german/swedish	3	\$27.00
194	washerwoman		7	\$9.50
195	stableman		9	\$16.50
196	truckman	american	4	
197	huckster	scotch/irish	8	\$4.50
198	longshoreman	polish	5	\$9.00

REFERENCE NUMBER	OCCUPATION	ETHNICITY	NUMBER OF PEOPLE	WEEKLY INCOME
199	carpenter	german	4	\$11.75
200	painter		5	\$13.00
201	expressman		7	\$10.00
204	waiter		2	\$7.00
205	landlord		2	\$50.00
206	caretaker	irish	4	\$14.00
209	sailor		7	\$12.00
210	housekeeper	german	8	\$22.50
161(159)	washerwoman	english		
109(147)	builder	scotch/american	2	
166(31)	carpenter	german	5	\$23.00
180(166)	carpenter	german	5	\$15.00
187(34)	watchman	german/irish	10	\$19.00

All weights on table are in grams, prices are dollars and cents.

HOUSEHOLD	30		31		32		33		34	
	WGT	COST	WGT	COST	WGT	COST	WGT	COST	WGT	COST
SAUSAGES										
BOLOGNA					1.10	0.15				
LIVER										
PORK										
CERVELAT					1.00	0.2				

HOUSEHOLD	35		37		38		47		48	
	WGT	COST	WGT	COST	WGT	COST	WGT	COST	WGT	COST
VEAL										
BREAST										
CHOPPED ROUND										
LOIN										
LEG					5.50	0.6	5.00	0.6		
SHOULDER			8.00	0.71						
CHOPS					3.06	0.24				
CUTLETS										
HEAD CHEESE										
MUTTON										
SHOULDER										
BREAST										
CHUCK										
LOIN										
LEG										
CHOPS			1.38	0.13						
NECK										
STEW MEAT					2.00	0.1				
SIDE										
LAMB										
CHOPS										
LEG										
BREAST										
PORK										
HAM, CORNED										
HAM	10.20	0.99	6.50	0.83						
HAM, SMOKED										
SPARE RIB ROAST							2.94	0.3		
SPARE RIB NECK										
HEAD										
LARD										
CHOPS	6.49	0.43	1.00	0.12	4.00	0.48			2.00	0.24
SHOULDER										
SHOULDER, SHOULDER SMOKE										
SHOULDER, SALT										
BACON	3.00	0.45			2.74	0.3	1.38	0.17		
SALT			1.00	0.1						

HOUSEHOLD	161		162		166		167		168	
	WGT	COST	WGT	COST	WGT	COST	WGT	COST	WGT	COST
VEAL										
BREAST			4.12	0.35						
CHOPPED ROUND					1.25	0.2	3.00	0.3		
LOIN							2.50	0.2		
LEG							4.00	0.36		
SHOULDER										
CHOPS										
CUTLETS										
HEAD CHEESE										
MUTTON										
SHOULDER										
BREAST										
CHUCK										
LOIN										
LEG									8.50	1.1
CHOPS	0.81	0.15							37316.0	.36/24
NECK										
STEW MEAT										
SIDE										
LAMB										
CHOPS	1.31	0.18								
LEG										
BREAST										
PORK										
HAM, CORNED										
HAM					0.75	0.15				
HAM, SMOKED			3.51	0.64					9.00	1.2
SPARE RIB ROAST										
SPARE RIB NECK										
HEAD										
LARD					1.50	0.12				
CHOPS	2.24	0.25								
SHOULDER										
SHOULDER, CORNED										
SHOULDER SMOKE							3.25	0.23		
SHOULDER, SALT										
BACON			0.38	0.05					3.50	0.34
SALT	4.00	0.28					1.00	0.06		

HOUSEHOLD	170		171		172		177		178	
	WGT	COST	WGT	COST	WGT	COST	WGT	COST	WGT	COST
VEAL										
BREAST										
CHOPPED ROUND										
LOIN										
LEG										
SHOULDER	1.00	0.08								
CHOPS										
CUTLETS										
HEAD CHEESE										
MUTTON										
SHOULDER							1.00	0.80		
BREAST										
CHUCK										
LOIN										
LEG			11.13	0.96	10.50	0.76				
CHOPS							2.50	0.35		
NECK					2.00	0.09				
STEW MEAT										
SIDE										
LAMB										
CHOPS										
LEG	7.00	0.56								
BREAST										
PORK										
HAM, CORNED			2.00	0.15						
HAM							0.56	0.10		
HAM, SMOKED										
SPARE RIB ROAST	2.36	0.15								
SPARE RIB NECK										
HEAD	1.00	0.05								
LARD					9.75	0.98	0.25	0.02		
CHOPS			3.50	0.35						
SHOULDER										
SHOULDER, CORNED										
SHOULDER SMOKE										
SHOULDER, SALT			5.10	0.35						
BACON					0.50	0.06				
SALT	2.25	0.17			4.00	0.39				

HOUSEHOLD	196		197		198		199		200	
	WGT	COST	WGT	COST	WGT	COST	WGT	COST	WGT	COST
VEAL										
BREAST										
CHOPPED ROUND										
LOIN					5.00	0.42				
LEG										
SHOULDER										
CHOPS										
CUTLETS										
HEAD CHEESE			1.50	0.10						
MUTTON									0.75	0.06
SHOULDER										
BREAST										
CHUCK										
LOIN										
LEG	2.69	0.34								
CHOPS			2.75	0.36						
NECK										
STEW MEAT										
SIDE										
LAMB										
CHOPS										
LEG										
BREAST										
PORK										
HAM, CORNED										
HAM										
HAM, SMOKED					4.26	0.48				
SPARE RIB ROAST										
SPARE RIB NECK										
HEAD										
LARD			1.00	0.06			0.40	0.04		
CHOPS					3.13	0.33			5.00	0.47
SHOULDER							3.50	0.35		
SHOULDER,										
SHOULDER SMOKE							1.50	0.15		
SHOULDER, SALT										
BACON			4.00	0.48	1.00	0.12				
SALT							1.14	0.08		

HOUSEHOLD	210		TOTALS		AVERAGE
	WGT	COST	WGT	COST	DOLLARS/POUND
BEEF					
NECK			5.20	\$0.39	\$0.08
CHUCK			14.89	\$1.40	\$0.09
CHUCK STEAK	5.50	0.51	41.70	\$4.00	\$0.10
FORE SHANK			44.10	\$2.87	\$0.07
HIND SHANK			35.02	\$1.97	\$0.06
SOUP PIECE			8.77	\$0.60	\$0.07
CROSS RIB			29.29	\$2.25	\$0.08
STEW PIECE			5.95	\$0.45	\$0.08
MEAT			7.45	\$0.63	\$0.08
CORNERD FLANK			22.70	\$1.59	\$0.07
CORNERD,			47.10	\$3.54	\$0.08
CORNERD SHOULDER			14.70	\$1.28	\$0.09
CORNERD PLATE			8.45	\$0.59	\$0.07
CORNERD RIB			17.39	\$1.44	\$0.08
CORNERD, CANNED			6.20	\$0.59	\$0.10
CORNERD RUMP			18.50	\$1.74	\$0.09
CORNERD BRISKET			39.23	\$2.61	\$0.07
TRIBE			19.77	\$1.19	\$0.06
SUET			6.70	\$0.44	\$0.07
ROAST ROUND			12.01	\$1.12	\$0.09
ROUND			53.10	\$6.71	\$0.13
ROUND STEAK			71.33	\$7.91	\$0.11
HEART			5.20	\$0.39	\$0.08
KIDNEY			7.49	\$0.59	\$0.08
LIVER			12.20	\$0.91	\$0.07
STEAK SKIRT			17.20	\$1.28	\$0.07
SIRLOIN STEAK			41.36	\$5.43	\$0.13
FLANK			10.92	\$0.84	\$0.08
STEW MEAT			5.20	\$0.39	\$0.08
SHOULDER			15.24	\$1.32	\$0.09
COTTOLENE			8.76	\$0.69	\$0.08
CHOPPED			16.44	\$1.54	\$0.09
BLOOD			7.20	\$0.49	\$0.07
DRIPPINGS			5.45	\$0.40	\$0.07
FRANKFURTERS			10.23	\$1.03	\$0.10
STEAK			5.95	\$0.49	\$0.08

HOUSEHOLD	210		TOTALS		AVERAGE
	WGT	COST	WGT	COST	DOLLARS/POUND
VEAL					
BREAST			10.54	\$0.79	\$0.07
CHOPPED ROUND			9.45	\$0.89	\$0.09
LOIN			15.60	\$1.54	\$0.10
LEG			25.21	\$2.50	\$0.10
SHOULDER			14.78	\$1.24	\$0.08
CHOPS			10.72	\$0.98	\$0.09
CUTLETS			7.70	\$0.65	\$0.08
HEAD CHEESE			6.70	\$0.49	\$0.07
MUTTON	5.50	0.65	21.95	\$2.17	\$0.10
SHOULDER			14.47	\$1.12	\$0.08
BREAST			6.00	\$0.47	\$0.08
CHUCK					
LOIN					
LEG			43.43	\$5.43	\$0.13
CHOPS			11.14	\$1.17	\$0.11
NECK			6.95	\$0.50	\$0.07
STEW MEAT					
SIDE			9.58	\$0.95	\$0.10
LAMB			8.70	\$0.71	\$0.08
CHOPS			12.01	\$1.03	\$0.09
LEG			22.10	\$2.31	\$0.10
BREAST					
PORK					
HAM, CORNED			7.20	\$0.54	\$0.08
HAM	0.50	0.10	43.78	\$5.55	\$0.13
HAM, SMOKED			31.73	\$4.04	\$0.13
SPARE RIB ROAST			34.30	\$2.76	\$0.08
SPARE RIB NECK			7.45	\$0.47	\$0.06
HEAD			8.26	\$0.54	\$0.07
LARD			11.73	\$6.81	\$0.58
CHOPS			60.54	\$5.89	\$0.10
SHOULDER			8.70	\$0.74	\$0.09
SHOULDER, CORNED			10.76	\$0.81	\$0.08
SHOULDER SMOKE			15.20	\$1.20	\$0.08
SHOULDER, SALT			10.30	\$0.74	\$0.07
BACON	1.00	0.10	32.96	\$3.66	\$0.11
SALT			20.29	\$1.48	\$0.07

HOUSEHOLD	210		TOTALS		AVERAGE
	WGT	COST	WGT	COST	DOLLARS/POUND
PORK (CONT)					
LOIN	7.00	0.70	30.82	\$2.86	\$0.09
FEET			13.20	\$0.82	\$0.06
FEET, PICKLED			5.20	\$0.39	\$0.08
FRESH			10.20	\$0.72	\$0.07
TRIMMINGS			17.20	\$1.59	\$0.09
FRANKFURTERS			5.45	\$0.43	\$0.08
HEAD CHEESE	1.00	0.10	7.20	\$0.59	\$0.08
CHICKEN			28.93	\$3.55	\$0.12
COD, SALT			14.20	\$1.05	\$0.07
COD, BONELESS			6.95	\$0.52	\$0.07
COD			42.27	\$3.36	\$0.08
MACKEREL, FRESH			11.20	\$0.70	\$0.06
MACKEREL, SALT			7.83	\$0.68	\$0.09
SALMON	1.00	0.10	6.20	\$0.49	\$0.08
SALMON, CANNED			12.20	\$1.79	\$0.15
SARDINES, CANNED			7.20	\$0.76	\$0.11
SARDINES			6.70	\$0.48	\$0.07
SMELTS			11.70	\$0.96	\$0.08
BLUEFISH			8.71	\$0.64	\$0.07
STURGEON	0.50	0.10	42.70	\$0.59	\$0.01
HERRING, FRESH			7.96	\$0.54	\$0.07
SHAD, FRESH			16.81	\$1.52	\$0.09
PIKE, FRESH			9.20	\$0.63	\$0.07
YELLOW PERCH			7.20	\$0.54	\$0.08
HALIBUT, FRESH			9.26	\$0.79	\$0.09
HADDOCK			12.23	\$1.76	
WHITE			6.70	\$0.57	\$0.09
FLOUNDER			16.05	\$0.93	\$0.06
WEAKFISH	6.00	0.30	11.20	\$0.69	\$0.06
EGGS			178.71	\$18.22	\$0.10
CLAMS	2.00	0.10	19.34	\$1.34	\$0.07
OYSTERS			10.51	\$0.99	\$0.09
MUSSELS, PICKLED			8.20	\$0.54	\$0.07

HOUSEHOLD	210		TOTALS		AVERAGE
	WGT	COST	WGT	COST	DOLLARS/POUND
SAUSAGES					
BOLOGNA	1.00	0.05	8.55	\$0.74	\$0.09
LIVER			5.70	\$0.49	\$0.09
PORK			9.20	\$0.83	\$0.09
CERVELAT			6.20	\$0.59	\$0.10