

# The Origins of an Everyday Behavior: Why do People Share Meals?

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## Abstract

Humans are socially driven creatures that require constant interaction. One way humans have consistently expressed their social nature since prehistory is through sharing meals. Recent studies and literature were examined in order to investigate the roots behind why sharing meals has been the most consistent method of social output. Through careful reading and analysis, reasons behind why people share meals were traced in perspective levels. The biological and molecular aspect explains how humans evolved from prehistoric primates and their similarities associated with food consumption. Genetics and food preferences also play a role by allowing humans to taste food rather than view consumption as a necessity. Social relationships and the structure of family promote eating together as a way to ensure the overall wellbeing of humans. Finally, in a larger perspective, humans share meals in every day scenarios that are deeply embedded in culture within every community.

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## **Evolutionary/Biological Level**

Humans live in large complex social structures. Some would argue that these social structures are remnants of human prehistory. This chapter will explore topics related to the development of humans from prehistoric primates. The similarity of brain size along with other physical features will be explored. The concept of optimal foraging through group formation and collaboration will be discussed. Lastly, the evolutionary shifts that ultimately separate humans from any other species will be investigated.

In order to understand the innate reasons behind why people share food, the evolution of humans and development of human culture must be considered. One way to do this is compare the similarity between humans and primates. Numerous scientific studies claim that humans evolved from the larger primates (Jones). Similar social interaction and physical features give reason behind why evolutionary scientists believe that humans evolved from these larger primates (Wilson).

One physical feature that both modern humans and primates share is a larger skull compared to most mammals. Fragments of the ancestors of primates were found in the Fayum depression of Egypt (Jones). The bone fragments of the skull and teeth of ancient primates were fossilized within tree trunks roughly 35 million years ago. By studying the fossil records, scientists pieced together our shared history. It is understood that larger primates are the evolutionary products of these ancient primates. The skull was much larger in relation to its body size compared to

any other animal species around its time (Jones). A larger skull typically indicates that a larger brain is held in place within the cavity (Dunbar). An increased brain size allows for more neural processing. In this case, more neural processing allows more room for memories and overall brain functionality. In terms of different kinds of social aspects, a larger brain would allow for a higher number of relationships that can be built with other individuals. More relationship connections are possible with a bigger brain, which allowed animals such as primates to recognize and cohesively work together in a group (Jones). Once these primates were able to build connections with one another, working together to survive turned out to an advantage that they had over other organisms that were unable to build these relationships. So once these larger primates were able to recognize each other and build complex social relationships with one another, they were neurologically capable of working together in a more efficient way to survive.

One of the more optimal ways to capitalize survivability through cooperation with one another is to obtain food. D.A. Booth describes this as the optimal foraging theory, which estimates how natural selection promotes optimal strategies of using feeding sites and food materials (Booth). Efficiency of a foraging strategy can be based on the net yield of metabolic energy. The energy gained from eating minus the energy required to obtain food is the net yield of energy. The higher the net yield, the more likely that the species would survive. For example, a “simple minded” bird must travel to multiple places in order to obtain food. A dock laborer must work relentlessly in order to make just enough money to provide food for himself. Both examples give rise to a very small net yield of metabolic energy, since

the majority of the energy is being spent on obtaining food. Although this may be required for an individual on its own, there are much more efficient ways for obtaining food. An individual would benefit more and obtain a higher net yield of metabolic energy through optimal foraging.

Natural selection would clearly promote those that were able to obtain the higher net yield of metabolic energy, in this case the larger primates with the capacity for complex social interactions (Booth). Animals innately congregate wherever food sources are plentiful, since obtaining food is of highest priority (Ulijazsek). In the case of larger primates, relationships could be formed with one another once they congregated at these food sources. Since a bigger brain allows room for more complex relationships and connections to form amongst larger primates, bigger groups are formed. Group formation and collaboration would increase the efficiency of obtaining food particularly through hunting.

Despite physical similarities, the most intriguing similarity shared between both is how they hunted prey. These primates formed organized groups and a more complex strategy when hunting. They formed all male hunting packs in order to obtain food. Before agriculture became the main source of food for humans, also we utilized the same strategy for food. Hunting in groups is uncommon in mammals as a whole, but both species shared this unusual hunting strategy (Wilson).

If hunting groups are formed, this means that the rest of the pack comprised of the female and the young have to stay put. While the males are away, campsites are formed creating a division of labor: some forage and hunt, the others guard the campsite and young (Wilson).

One specific example found amongst larger primates regarding group collaboration based upon food sources can be found with a particular group of forest dwelling monkeys in Africa. These monkeys, which share the same ancestry as larger primates, are able to build social groups through group formation around food sources. Individuals within these types of monkeys congregate at plentiful food sources and build relationships amongst themselves (Jones). The females in particular migrate and stay close to food sources innately, while males did the same in order to find a mate as well as obtaining food. Although both sexes have different reasons for living close to the source of food, they are able to form groups and live together. From these interactions, mating is much more efficient and families of monkeys can be formed. A male monkey is selected as a mate by proving himself in food-sharing largesse; sharing larger amounts of food compared to other competitors which ultimately allows for the passing of his genes. The next generation of offspring is generated and must be nurtured in order to survive and innately pass on genes. However, food eventually becomes scarce in that particular spot and a new source must be found. Since food is the limiting factor in this case, both genders must be able to obtain food in an efficient way. While the mother and her offspring are not quite as mobile as the male monkey, a system must be established in order to efficiently obtain food for everybody. Since the mother is limited due to bearing offspring and tending for the smaller, juvenile primates, the males must go out and collect food for their mate and offspring. This form of collaboration allows for the most efficient way of surviving since both the male and

female work in different ways to survive. While the male provides food for everyone, the female tends to the young, allowing for generations to continue.

Another classic example is found in lions, which are typically viewed at the top of the food chain. Lions, who live, travel, and eat together, are able to efficiently obtain food through group collaboration. They effectively hunt together to increase their chances of obtaining food. Once they do, they eat together and move on as a whole unit. One lion trying to catch prey is much less threatening than an entire pack. It would take that individual lion countless tries to obtain a much smaller prey, which results in a much smaller net gain of metabolic energy. However, a pack of lions that often catches larger prey can share their food and food is consistently available even though an individual lion may have to wait to eat its share of the kill. Group collaboration allows for a much more efficient way of obtaining food since others can be relied upon.

The formation of groups gives rise to distinct roles that increases the overall efficiency of obtaining food. In the case of lions, the female lions hunt together while the male lion stays close and protects the offspring. With the African forest dwelling monkeys, the males travel to obtain food while the females tend to stay closer to home with the young. One gender is able to benefit from the other, promoting the overall survivability of the species. This collaborative effort brings about the behavior of eating together in groups. Though each gender has its own distinctive role, as a unit they live, hunt, and eat together efficiently. This cooperative unit is what gives rise to gender roles. Gender roles go hand in hand with group cohesion.

Whether the group constitutes as prey, females and offspring, or predator, male hunters, it serves as a form of protection (Wilson).

Group formation serves as a form of self-defense against natural predators. Predators are much more likely to attack a lone individual as opposed to a herd of prey. Even when predators hunt for prey in groups, as lions do, the chance of an individual prey animal to survive is much higher due to the sheer number of individuals within the prey group. For example, a pack of lions typically approach prey, say a herd of gazelles, and eventually obtain their food. As an individual gazelle, the chances of surviving an ambush from lions significantly increase since there are so many other gazelles to choose from. Even though one of the group members may fall prey to the lions, every other gazelle is able to survive due to being part of a group. If every gazelle were solitary, an ambush from any type of predator would typically result in death. So even though living in a herd does not give complete immunity from predators or other outside dangers, it allows for an increase of survival.

After understanding the benefits of group formation amongst animals and the efficiency of optimal foraging due to living with each other, it is important to see how this is reflected in humans. Humans evolved from larger primates. In terms of social interaction, the large skull size, which holds a bigger brain, is a key similarity. Not only does the bigger brain allow for more room to build relationships with other organisms, but also it allows for more advanced forms of cognition (Jones).

The earliest preadaptation was a larger body and the development of dexterity. This trait is what distinguishes primates from any other land-dwelling

mammals. While claws are ill suited for the development of advanced technology, manual dexterity provides the necessary skill set for holding and manipulating detached objects (Wilson).

In order to efficiently utilize such hands and fingers, a more optimal way of movement was needed. This was accomplished by the adaptation of standing up and walking entirely on hind legs. This places more emphasis on utilizing hands for manipulating objects instead of locomotion (Wilson).

The following adaptation was the ability to create fire. Even with a higher level of cognition, no other species was able to master fire. Progression in technology towards present day innovations all required the beginning of taming fire. Without it, no one could have developed modern day culture that is capable of building skyscrapers, explain the molecular characteristics of water, or break the sound barrier (Wilson).

The next step of adaptation was the shift in diet towards a heavier emphasis on meat. Meat yields higher energy per gram than vegetation. This means that less time and energy was necessary for obtaining food. Also, meat could be preserved, sterilized and cooked with fire, opposed to vegetation. Coupled with the formation of highly organized groups, it allowed for more energy and time spent on other activities (Wilson).

Along with these adaptations, the most important shift in evolution was the gradual increase in cognition. Even with a higher level of manual dexterity and locomotion, a higher order of thinking is what ultimately allowed humans to

efficiently live amongst one another, innovate, and develop into the most dominant species on the planet (Jones).

## **Genetics/Preference Level**

Since the taming of fire to present day, the use of fire as a taste-enhancing method has always been practiced (Jones). Cooked food is easier to chew as well, which further enhances taste. Also, food cooked with fire permits for the preservation and sterilization of meals, thereby decreasing food borne diseases and allowing time to experiment with taste. With a higher quality of thought processing, humans were able to widen their range of food preferences through the use of fire.

What allows humans to taste food? It is something that humans had to evolve in to or are we genetically wired with a preference? In this section, the genetic and environmental roles of food preferences are explored in order to understand why humans are able to taste food and create preferences. Members of a species have a unique diet in a group that further distinguishes them from others, but members of a group have a vastly wide range of dietary preferences, indicating that genetics may not be the only reason behind food choices.

The sense of taste gives animals the ability to evaluate the food that is being consumed. At its basic function, this evaluation promotes the consumption of nutritious food and the prevention of potential toxins that are harmful to the body. With that said, animals are capable of developing taste aversions, especially if they become ill directly after eating certain types of food. The sense of taste is mediated by taste receptor cells located in small pegs on the tongue called papillae. Within these pegs, a small taste pore is located on the tip that allows food to come in

contact with the taste receptors. When taste cells are stimulated due to bindings of specific chemicals, the dendrites depolarize, resulting in an action potential that is ultimately registered in the brain (Bowen).

The sense of taste is due to the excitation of these taste receptors. The different reception of taste comes from the larger number of specific chemicals identified and perceived by the brain. In humans, food that is perceived as sweet usually indicates energy rich nutrients, while bitter indicates the presence of natural toxins (Bowen).

Humans are thus genetically wired to be attracted to sweeter food and react aversively towards bitterness. In a molecular aspect, the receptor for sweet is due to the coupling of a protomers to form G-protein. A  $T_1R_2$  protomer combines with the  $T_1R_1$  protomer to form the functional heterodimeric G-protein, which gives rise to the sensation of sweet foods in humans (Kringelbach). In the case of bitterness, a  $T_2R$  protomer couples with the  $T_1R_1$  protomer in order to create another heterodimeric G-protein that allows humans to perceive the sensation of bitter (Kringelbach). If these heterodimeric G-proteins alone indicated human's perception of food taste, then genetics would play the major role on food preferences. Based solely from a genetic perspective, this would mean that there would be a universally similar preferences for food if the genes were expressed at the same level and location.

However, Morten Kringelbach's findings based on the *Pleasures of the Brain* suggest that the perception of taste, rather than specific receptors, is the ultimate driving force behind food selection (Kringelbach). He explained how food with

nutrients that react with sweet receptors, where the  $T1R2$  couples with the  $T1R1$  subunit, that holds the perception of a bitter taste cell would still give rise to an aversive reaction. Yet, a taste cell that is perceived as sweet with bitter receptors will bring out an appetitive reaction. In this case, it's the actual perception of the taste, rather than which receptors are active, that drives food preferences. This means that while genetics emphasize certain types of food over others, they are not the only thing that shapes an individual's overall dietary habit. If genetics are not the sole contributor to food preferences, then the environment must also play a factor.

In one particular case study, the genetic and environmental contribution to food preferences for a wide variety of foods in pediatric twins was observed (Fildes). Most health professionals believe that the absence of junk foods and the provision of health foods promote healthier dietary habits within a household. With that in mind, the home environment would be the main factor in food preferences. On the other hand, parents believe that some kids seem to innately dislike certain types of food, vegetables in particular, even though they were raised around them (Fildes).

In this study, preferences of different foods categorized as a vegetable, protein, fruit, dairy, starches, and snacks were assessed by a parent-completed questionnaire with children at the age of 3 (Fildes). Both monozygotic, 100% of genes are shared, and dizygotic, 50% of genetically shared genes, twins were assessed in order to indicate any differences in food preferences based on genetics, since household environment is the same. For all the foods, monozygotic twins

correlated much more similarly than dizygotic twins in terms of overall preference. Since monozygotic twins share more genes than dizygotic twins, it is indicative of genes playing a role in preferences. Even though these children grew up in the same home environment there were mixed preferences for fruits and vegetables. However, all of the foods categorized under snacks had little to no preference variations between each set of twins. This indicates that environmental influences dictate snack preferences (Fildes). Since only certain types of snacks are present in each household and similar preferences of snacks was observed within each twin set, it is recognized that a household environment also helps shape the overall food preferences of a child.

The findings of this study on children's food preferences provide strong evidence children are influenced by both genetic and environmental factors (Fildes). The parents' sense that some children are inherently opposed to certain foods, such as fruits and vegetables, was supported by genetic evidence. Health professionals were also correct in that the home environment was highly influential in children's preference over certain food.

Humans have unique characteristics, influenced both genetically and environmentally, that allow us to divide food into categories of good tasting food and bad tasting food, a list that ultimately comprises an individual's food preferences. Since every individual has their own type of food preferences, people will naturally eat around those who share the same taste. When people share food with others who share the same preferences, sharing a meal is seen as a "collective tradition" (Kringelbach). Since not every group likes the same type of foods, sharing

a meal that is mutually preferred brings out a sense of identity and uniqueness amongst the sharers. One is more likely to eat with others who actively look for similar food tastes, creating a unique phenomenon that promotes group eating as a form of tradition.

In perspective, humans pay tribute to their commonality of food tastes when eating together. If food preferences were based on receptors solely, eating might not have developed into a “collective tradition” since there would be no distinction between food preferences (Kringelbach). If every group had the exact same type of preference, eating particular food in a group would not be seen as a tradition that uniquely identifies the group. Under this notion, food consumption would be seen more as a biological necessity as opposed to a “collective tradition”. Without unique food taste preferences, humans would not view sharing food as a form of pleasure.

Since food consumption is a biological necessity that is innately driven in humans, pleasure is genetically associated with eating. Dopamine functions as a chemical neurotransmitter that is released by nerve cells in order to send signals to another nerve cell. This specialized dopamine system within the brain plays the major role in the motivation-reward behavior evoked in humans. In particular, the synaptic actions of dopamine in the nucleus accumbens within the brain give rise to the feeling of reward (Smith). It is what gives humans the feeling of pleasure, which further motivates and increases the behavior that produced it. In this case, the behavior of eating is what humans will actively seek to repeat.

Humans require the constant consumption of food and are innately wired to actively eat daily as warm-blooded animals. Food consumption is also required for

every day basic functions; it makes sense that the behavior of eating is an action that is paired with reward. With food consumption coupled with pleasure, further ensures both one's existence and well being.

A similar process of dopamine release has also been observed with many other behaviors. In particular, during social interaction and related behaviors, there are several neurotransmitters that are activated. Specifically, dopaminergic neurotransmitters, in this case dopamine and serotonin, are activated when any form of social interaction takes place (Yacubian). Since the reward system within the brain is activated, the behavior of social interaction will also be further reinforced just like eating. Since both behaviors increase the release of dopaminergic neurotransmitters, humans are able to experience a much higher level of pleasure. Combining both behaviors gives rise to a higher feeling of reward and pleasure, which reinforces the behavior of eating in groups.

Humans are constantly learning and behavior is typically either reinforced or not reinforced based on this reward/motivation system. Since learning is what allows humans to distinguish between what types of behavior rewards and what does not, the drive for eating in groups is promoted over the drive for eating alone. Humans are reward driven, meaning that they actively seek social interaction during food consumption (Smith). This increase of pleasure from the combined behavior of eating in groups gives a physiological reason behind why people share meals.

### **Family/Relationship Level**

Traditional couples are created from the union of a man and a woman. From an evolutionary standpoint, this is the beginning process in which genes are passed on from generation to generation. When a couple does come together, including same sex unions, two different backgrounds with varying habits must be able to integrate in order to nurture the next generation, thus creating a family. The idea of family is the centerpiece for the transition from one generation to the next. It is through family where habits begin to form as a child and since every household is unique in its own way, couple formation can only be successful through cohesion of preexisting habits. In this case, dietary habits are explored before and after the formation of a couple. Also, the benefits and consequences of sharing, or not sharing, meals within a traditional family or a group of peers are explored.

When a couple is formed, an essential feature of living together is eating together on a daily basis. In one study, 22 spouses both mono-national and bi-national, were interviewed to determine a number of different aspects of their relationship related to food. Within the interview, everyday food consumption was recorded and the notion of accommodating preferences was assessed. Based on the interviews, both mono-national and bi-national couples have to sacrifice self-focused food preferences in order to accommodate each other. In particular, bi-national couples tend to have a greater struggle finding a happy medium in a shared dietary habit since one spouse is native, while the other spouse is foreign. Based on

findings, the native spouse is typically more willing to sacrifice more of his or her preexisting dietary habits, since it is understood that the foreign spouse had already taken the greater sacrifice by living in a completely new setting (Cross).

Of all the spouses observed, none indicated that separate meals took place due to major differences in food preference. In the long run, studies showed that spouses would make compromises and adapt to have the maximum potential similarity in food preferences (Kremmer). Kemmer et al. concluded by a study on newlyweds, “The ability to enjoy food together is a metaphor for a compatible relationship”. Once a dietary habit is established within a couple, it further strengthens their relationship. These findings emphasize the importance of coherently sharing a meal between spouses in order to allow their relationship to last and produce offspring.

Eating together consistently from a newly formed dietary habit strengthens their bond, which diminishes the chances of separation. If the couples were to separate and the bonds were not strong enough with each other, the chance for this preexisting couple to pass on their genes diminishes. In this case, shared meals amongst couples promote the passing of genes. After the birth of a child, a family is formed, which is the central social structure in which humans live.

The concept of family is the essential key for genes to be passed from generation to generation. As couples begin to raise children within the family, the same, newly formed dietary habit shared by the couple is instilled in their children. This newly developed food preference and dietary habit, molded from eating together daily, passes on to the next generation that creates a commonality with one

another. Based on Alison Fildes's study, children's food preferences in the categories carbohydrates, dairy, and snacks were strongly influenced by what they grew up with (Fildes). This indicates that the couple's shared food preferences that fall under these categories heavily shape the diet of their children.

A commonality of food preference for the whole family to share and enjoy brings about a sense of unique identity for the family group. The idea of collective tradition is once again established since similar food preferences are shared (Kringelbach). When a young adult emerges from his or her family and enters the world, he or she finds a mate with common values and interests to continue the cycle. This ongoing cycle demonstrates that physical genes are not the only things that are being passed on. Collective tradition, which shapes family identity, is also being passed as well from generation to generation.

Once a family is formed, eating together on a daily basis regulates any form of bad eating behavior. For example, if one member of the family slowly begins to build up a bad dietary habit, constant supervision from other family members through group eating helps identify any indication of a bad habit. A group setting allows for the prevention of unusual eating patterns since it can be noticed, whereas bad habits of someone who eats alone would go unnoticed (Ogden).

The efficiency of group regulation within a family was further exemplified from a study done by C. Dare. In this study, three different types of therapy were tested in order to see which type proved to be most beneficial in treating anorexia nervosa. Anorexia nervosa is one of the most common eating disorders where someone might excessively diet or exercise due to fear of gaining weight. Even if

this person is considered to be at a healthy weight, this disorder makes people lose more weight than is considered healthy. In the study, three different types of methods were psychoanalytic, cognitive-analytic, and family therapy (Dare). Out of the three, family therapy seemed to have the most significant results when coping with anorexia nervosa, especially amongst younger patients. This study showed that the optimum method for regulating eating patterns is through family, rather than through any of the other psychotherapies. This is said to be the case due to the stronger influence that the family holds on younger patients (Dare). So not only does utilizing family prove to be the more effective method to treat anorexia nervosa, but also meals shared amongst each other can minimize unusual eating patterns.

In Jane Ogden's *From Healthy to Disordered Behavior*, the effectiveness of family therapy was assessed for treatment of eating disorders. Family therapy and individual support therapy was assessed on patients under the age of 19 diagnosed with anorexia or bulimia nervosa. Bulimia nervosa, like anorexia, is a common eating disorder that is characterized by binge eating in short periods and purging afterwards. Individual therapy relies upon the psychological dynamics on the patient alone (Ogden). Family therapy focuses more on changing the functionality of the entire family itself in order to treat the problem. Based on Ogden's findings, family therapy once again proved to be the more effective method. This further demonstrates the heavy influence of family dynamics on an individual. It further indicates the overall dependence on parents of the younger generation. If a family eats together everyday, unusual eating habits can be detected more easily and

through the strong influence within the family, the overall health of an individual can be regulated. This therapeutic process helps keep in check the food-based well-being of the youth. The idea of group regulation of unhealthy dietary habits ensures a healthy, forward progression of the upcoming generation.

Although eating in groups helps the younger generation, the elderly also seem to benefit from eating with others. In a study that tested individual health of 130 elderly adults, each adult was interviewed regarding their nutritional intake over the past week (Davison). Each adult was also asked how often they consumed meals and whether they typically ate with others. Ten elderly members in particular were rated with the best overall health and nutrient intake. The characteristic that was most commonly shared between these 10 individuals was that they were the most gregarious and more often ate in social settings than the other 120 elders. The 10 members that were rated amongst the lowest in nutrient intake were those that had a more isolated lifestyle. This study further provides evidence with how eating in groups tends to correlate with quality eating and good health. The same concept behind why children benefit from eating within a family can be made for the elderly. When one eats alone, there is no one there to critique or regulate any form of unusual eating patterns. The less likely an individual is to eat with others, the more likely a possible unhealthy diet would go unnoticed.

This is more evident based on Sandra Howell's study in *Nutrition and Aging*. Through Howell's findings, elderly people who tend to eat alone often neglect nutrient quality in favor of quick and easy preparations (Howell). In Davison's interview, the majority of the elderly viewed food consumption as a biological

necessity (Davison). If eating is viewed as more of a “chore”, eating easy preparations alone seems to be the most efficient method of food consumption. With this mentality, eating is not paired with the pleasure of a positive group dynamic, which ultimately results in developing poor eating habits.

The elderly that eat in groups tend to eat a higher quality meal. The emphasis on eating a more quality food is much higher when food is shared with one another. The EPIC-Norfolk conducted a long-term study of health and aging on 25,000 people in the age group of 40 to 80 (Conklin). For 20 years, diet and lifestyle factors were recorded from each individual. Older adults in a partnership over the age of 50 tend to have eaten 2.3 more vegetable products daily. Those who were widowed and lived a more sedentary lifestyle consumed 1.3 fewer vegetable products. However, widowers that lived with someone else consumed the same amount as those who still lived with their partner.

Older people who have higher social interaction tend to have lower mortality rates opposed to those with little social interaction as reinforced in a study by B.W. Penninx. In this study, the role of social support and personal coping resources were tested to see the relation to mortality among older people (Penninx). A sample population of 2,829 people aged between 55 to 85 of years was assessed based on periods of 21-34 months. Social support and personal coping was measured based on whether each individual’s social network included a partner or any number of social relations. Those that reported to have a smaller amount of social support, especially those without a spouse, had a higher mortality rate opposed to those that had a higher level of social relations.

Constant social interaction decreases the feelings of loneliness, which makes for a higher quality of life. The will to live is much stronger with a healthier lifestyle for the elderly. As noted earlier, dopamine levels are significantly higher during social interaction and eating. Since dopamine is what gives rise to pleasure, the elderly are able to live a higher quality and happier lifestyle which promotes a longer life. Those that live a more isolated lifestyle that do not socially interact on a daily basis do not have as many opportunities to an increase of dopamine levels (Smith). Since dopamine levels are indicative of an individual's happiness, those that hardly rise in dopamine levels experience low quality of life. A lower quality of life increases mortality, thus underlining the importance of social interaction.

The need for social interaction and mutual gratification develops in early life, and is reinforced throughout life. High morale and positive feelings relate to healthier digestive processes, meaning social interaction and the gratifications that accompany social eating foster improved dietary habits (Howell). This once again strengthens the case that eating and socialization overall promote healthy eating through psychological health. The more psychological support and companionship an individual has through social settings, the better the overall health and diet of the individual.

### **Community/Culture Level**

Before urbanization, humans either gathered or hunted, and traveled across land to obtain food. When a reliable food source was found, people settled around where food was abundant and worked together to live. Once agriculture was established, crops then became a major source of food in places where cultivation was optimal. This was possible through group collaboration in order to produce mass amounts of food. In North America, corn and wheat made up the majority of crops due to their suitability to grow in varying climatic and soil conditions (Lambert). Along with crops, wild animals such as dogs, horses, cattle, and sheep were domesticated for a variety of reasons such as food, protection, shelter, and transportation (Beam). Agriculture and tamed animals, grown and raised in farms, became the more dominant method of obtaining food. As villages formed around these farms where food was most present, people collaborated in order to grow and utilize food optimally. Since certain crops thrive in certain regions, trade between other villages allowed for a variety of food to be shared, creating collaboration amongst multiple villages. As more and more people gathered and settled in these areas, living styles were able to slowly modernize through such collaborative efforts.

Fast tracking to present day, cities and nations have formed from simple origins. Through these early group efforts to obtain food, group eating occurred and society continuously evolved. The roots of modernization were established in the earlier stages of human culture centered on gathering and eating as a group. It is

through this process that human culture evolved into its present day modern form. Although food gathering has modernized to where it is today, group eating is a biologically shaped behavior imbedded in human culture that started from people gathering and hunting where food sources were abundant (Booth).

Sharing food symbolizes social coherence, which is especially seen through family meals. However, the same concept applies to multiple families that share a meal together. Eating together with people outside of the immediate family group further creates a bond with other, unrelated individuals. Alongside consuming food, social interaction takes place and brings out a closer atmosphere when a meal is shared.

One particular study on this topic focused on the overall attraction of food sharing. In this study, 210 university students were shown videos of adults in a dining setting that shared a meal together and videos where no food was shared (Alley). The students were given a survey that concerned the levels of attraction and intimacy of the people in the video. Students rated the video that displayed a shared meal highest in attraction and intimacy levels and rated the video that showed no food sharing the lowest. A similar case can be made amongst families. Higher levels of attraction and intimacy are associated with food sharing, attributing to the notion of social coherence. From one family to another, eating together expresses cohesion and harmony.

Once this is established, the concept of a community forms since the families within it are able to live alongside one another. Acts such as eating together symbolize the harmony within the community. Eating together strengthens the

bond and relationships between multiple families that allow for the emergence of communities. When a community shares food amongst its members, it shows an ecological commonality since similar diets are shared. Eating together and expressing social coherence is indicative of the kinship and land shared amongst people (Jones). This central idea, expressed and reinforced in group eating, allows communities to prosper and modernize.

As these communities continuously grew and modernized, distinct identities began to emerge within these communities that created a unique sense of belonging to those that lived within it. These identities, after countless generations, slowly evolved into modern day culture.

In U.S. culture, men and women traditionally have had a division of labor within each household. Typically, women are more household oriented, while males are more focused towards their jobs. The tendency of this division is demonstrated by Sharon Bartley's findings of gender roles and the division of labor in the year 2005. A total of 233 participants completed 4 different instruments, or scales, based on decision making, gender roles, divisional labor, and equity (Bartley). Results came out to be that low-control household labor and high-control household labor moderately differed between both sexes. Women were mostly associated with low-control household labor as men were to high-control household labor. Low-control household labor is typically associated with repetitive, everyday tasks such as cleaning and cooking, whereas high-control labor involves more non-repetitive and specialized tasks, such as taking out the trash and yard work.

However, Bartley noted that these gender roles have become less apparent over the course of the past decades. With more women employed outside of the house, gender roles are starting to become less distinguishable. It is common now to see men take on low-control household labor just as much as women (Bartley). Regardless, the division of labor within a household ultimately leads towards a more optimal lifestyle.

Even though stereotypically gender roles have slowly begun to vanish, divisional labor is still at the core of our culture. Infants are born at an extremely vulnerable state that requires collaborative efforts from parents in order to properly raise their kids as well as sustaining their own lives (Jones). There are defined roles in each gender, unique to each household that ultimately leads towards the benefit of each member of the family. Whether it is cleaning, cooking, or working, both parties ultimately take up different jobs in order to eat and sustain life.

Regardless of vanishing gender roles, division of labor at its core remains advent of human culture. In places where gender roles are still distinct, women stayed near home and took care of their children while men went out to hunt. In the modern world, men are still utilizing a similar concept in that they work in order to make money, which allows them to bring food back home. The division of labor still optimizes food gathering and maximizes benefits for each individual (Bartley). Each role is specialized to help the overall goal of maintaining food and living a more optimum lifestyle. This division of labor benefits a more group-oriented setting, which ultimately involves group eating.

Eating with others is also promoted when culture established typical times of the day to eat. In the U.S., and in most places around the globe, there are typically three parts of the day when a meal is consumed: breakfast, lunch, and dinner (Elias). The central routine of breakfast, lunch, and dinner is in place because the majority of the people to start feeling hungry and eat around the same time of the day, which ultimately encourages group eating. Before urbanization, all 3 meals are typically shared within the family. In a traditional, American household in present day, breakfast and dinner are eaten as a family. However, lunch is a different case. Since the modernization of American life and the establishment of public school systems, children eat lunch at school while parents share meals with co-workers at work (Elias). People are constantly around others, whether at school or work, which further more encourages eating with one another. Group eating still takes place, regardless with whom it is shared, since meals are shared in a systematic schedule. This process is culturally inscribed within U.S. societies and further promotes group eating (Elias).

In times of celebration, eating is almost always associated within these social gatherings. Special occasions such as weddings or something as simple as a birthday party for a child all have sharing a meal as a common feature. During these special occasions, people gather, celebrate, and eat together in order to define the importance of the event. Eating together is an integral part of celebration, which further strengthens the cultural influence of sharing a meal (Meiselman). Group eating allows for maximum social output and is culturally essential for these celebrations.

Holidays, such as Thanksgiving, were even created specifically to celebrate the tradition of gathering and eating together. As a tradition, families and friends gather to eat together to celebrate this concept. This tradition is further strengthened by associating Thanksgiving with particular foods such as turkey, potatoes, pies, etc. When specific foods are incorporated and embedded into holidays, the tradition is strengthened and given an identity that will pass on through generations (Elias).

Another form of celebration is through religion. For example, Korean protestant churches place a huge emphasis on sharing a meal with one another. Korean protestant churches across the U.S. serve multiple purposes other than religious faith. The social aspect plays a major role in attending church as well. Most immigrants have a tough time assimilating into the U.S. society due to language barriers. Throughout the week, Korean families are isolated in their adaptive culture since blending into a new environment is difficult with a cultured barrier. However, attending church on Sunday reunites them with their “group”, providing a social output necessary for human beings. The socialization that takes place within church is further promoted by the traditional lunch that follows directly after service. It is traditional for each family to bring a dish and to have a church wide meal (Min). This gathering centered on food sharing allows for maximum socialization that these Koreans are unable to do throughout most of the week.

In this sense, group eating is associated with religion. Religion is very much a branch of culture that people are a part of. This tradition is also seen in typical American churches as well. American church attendees typically eat at the church

or at a restaurant with fellow members after service. Just like with the Korean churches, eating out together allows for a socialization to take place. Since it is now seen as more of a routine, rather than a special occasion, it signifies how deeply embedded group eating is within culture.

Religion also serves as a way to express group cohesion between multiple families. It gives a sense of identity and belonging along with a social benefit for members of the church. Meals are shared after service that further reinforces the unity amongst church members. Since sharing food is considered a common tradition held at least once a week, it is ultimately part of culture shared amongst the group of members.

All of these celebrations share two things in common: the importance of social gathering and eating together in order to celebrate it. Eating together is always associated when such gatherings occur. The common theme of eating together in time of celebration is one that defines culture.

## **Conclusion**

Within a Paleolithic hut that dates close to 30,000 years ago, traces of a hearth of charcoal, mixed along with flints and bones of animals, indicated the use of fire. Within this space, food was cooked, and around it people gathered to share food with one another. With other species, fire is typically viewed as a threat or form of danger. Direct face-to-face contact coupled with the opening of the mouth and exposure of teeth expresses hostility towards others. Combining these primal cues of hostility with food placed in between each other is almost a sure indication of conflict and violence within most species (Jones). However, our human ancestors did not adhere to these common primal instincts shared by most species. They viewed sharing meals in a positive light, a value that is reflected in to present day culture.

Through studying fossil records, scientists were able to piece together comparisons between modern humans and prehistoric primates. Both behavioral and physical aspects shared between both groups' reveal the common history that allowed both species to share meals.

The molecular mechanisms behind taste receptors, humans are able to develop unique food preferences. Most species' taste receptors are based upon innate cues of nutritional value or food illnesses. Humans, however, hold unique food preferences influenced by both environmental and genetic factors.

Family and elderly studies demonstrated that sharing meals also helps the overall well being of members within the group. Whether as an adolescent or an elderly adult, sharing meals supports quality dietary habits and helps prevent unusual eating patterns. Family settings place a heavy influence on dietary habits, and through the companionship of others, an older adult's overall health benefits from sharing meals.

In the broadest aspect, sharing meals is deeply embedded in present day culture. Sharing meals helps communities to cohesively exist despite coming from different backgrounds. From distinct gender roles to a less defined division of labor, sharing meals is promoted since collaboration amongst people is essential for sustaining life. Sharing meals also serves as a method of identity and celebration held uniquely amongst members of a group.

Since culture is continuously expressed in each generation, the concept of eating together will always be an integral part of everyday life regardless of what time period. Through time, humans have slowly evolved into the most dominant species on the planet. Although evolution is a continuous cycle that causes gradual changes in every species, eating together is the most common behavior found in humans. Sharing meals is something that has remained constant in the past and in the present, and will be part of the ongoing future.

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