The Kitchen of the Future

Pratt Institute • The LG Studio Process Guide:
Chapter One, Aesthetic Considerations: Historical &
Political Contextualization of the Kitchen

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The Kitchen of the Future

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Chapter 1

Aesthetic Considerations: Historical and Political Contextualization of the Kitchen

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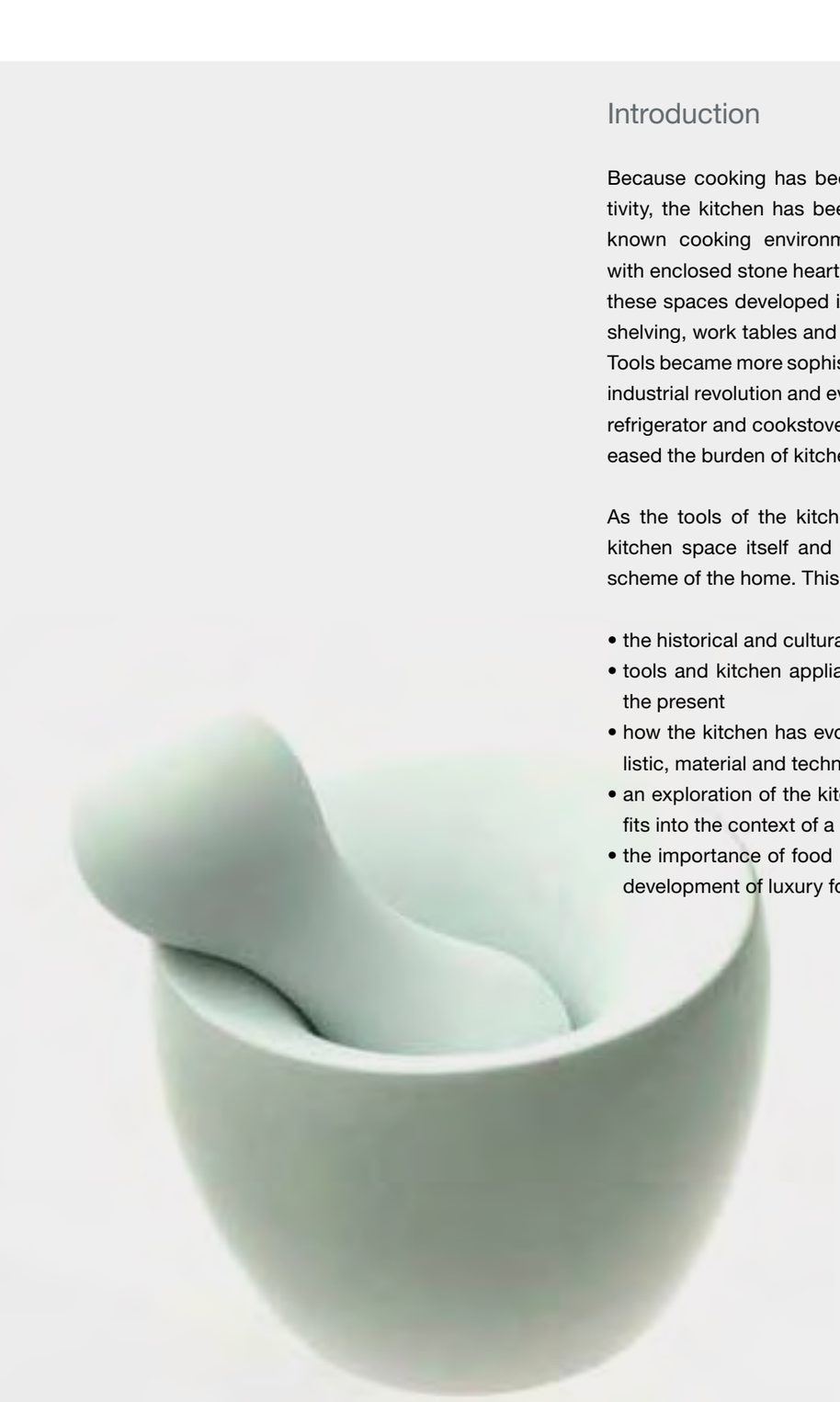


Introduction

Because cooking has been a primarily woman's activity, the kitchen has been her domain. The earliest known cooking environments were simple spaces with enclosed stone hearths, pits or ovens. Over time, these spaces developed into organized kitchens with shelving, work tables and specific types of cookware. Tools became more sophisticated with the onset of the industrial revolution and eventually, appliances like the refrigerator and cookstove were invented. These tools eased the burden of kitchen labor for many women.

As the tools of the kitchen evolved, so too did the kitchen space itself and where it fit into the overall scheme of the home. This chapter will cover:

- the historical and cultural significance of cooking
- tools and kitchen appliances from ancient times to the present
- how the kitchen has evolved aesthetically from stylistic, material and technological standpoints
- an exploration of the kitchen as a space and how it fits into the context of a home
- the importance of food presentation and the recent development of luxury foods

Early Kitchens

IMAGE 112 An example of an early stone age European kitchen.

The houses in Ancient Greece were around a central courtyard. In many such homes, a covered but otherwise open hearth served as the kitchen. Homes of the wealthy had the kitchen as a separate room, usually next to a bathroom (so that both rooms could be heated by the kitchen fire), both rooms being accessible from the court. In such houses, there was often a separate small storage room in the back of the kitchen used for storing food and kitchen utensils.

In the Roman Empire, most families relied on large public kitchens for their cooking needs. A few cooked on small mobile bronze stoves. Wealthy Romans lived in villas with well-equipped kitchens which were separated from the rest of the living quarters and were operated by slaves. The kitchen remained largely unaffected by architectural advances throughout the Middle Ages. Open fire remained the only method of heating food. In European medieval cities, the kitchen still relied on open fire hearths located in the middle of the kitchen. In castles and monasteries, living quarters and kitchens were in separate buildings.

With the development of the chimney, the hearth moved from the center of the room to a wall. This led to the invention of the first brick-and-mortar hearths. The fire was lit on top of the construction while a vault underneath served to store wood. The temperature of the flame was controlled by placing the pot higher or lower over the fire. Trivets were also used to rest the pots over the flame directly. Most pots were made from iron, bronze or copper. Before the advent of metal making technologies, pots were made from clay or ceramic.

Patriarchy Shaping Women's Identity through Cooking

In her book Male and Female Margaret Mead observed that "in every known human society, the male's need for achievement can be recognized. Men may cook or weave or dress dolls or hunt humming-birds, but if such activities are appropriate occupations of men, then the whole society, men and women alike, votes them as important. When the same occupations are performed by women, they are regarded as less important."

Even though women's work, especially cooking, has been historically viewed through men's eyes as insignificant, many women have continued to cook as a source of pride and identity. Psychologically and physically bound to men's perceptions, women have sought the approval of their own families, particularly the men, through the food they cook.

IMAGE 113 Margaret Mead, an anthropologist and intellectual posited that patriarchy necessarily limited the importance of women's work to maintain men's elevated status.

To some women, cooking as an expression of love is a good thing. It is often expressed that the best cooks are the ones who cook with love. These women may believe that "the person who cooks for the family is continually creating one part of the reality of household life and constructing her place within the family as one who provides for the needs of others." To be needed and to help nourish one's family become the most important tasks with such an ingrained mindset.

Commonality Through Cooking

Ingredients, techniques and tools may vary widely but in all parts of the world throughout history, women are the household cooks. Techniques and recipes are generally passed down from generation to generation, from mother to daughter however some cultures maintain strict traditions about who receives these recipes. Being a good cook is a source of pride for many women and provides them with status.

IMAGE 115

IMAGE 116 In all parts of the world, cooking is considered to be a social activity, especially among the kinswomen of common villages. Apache women (top) and Lebanese women cook in pairs, passing down stories and recipes.

IMAGE 114 A group of contemporary women in Dakar, Senegal cook together and socialize.

In Lebanon, bread recipes are passed down from the mother to oldest daughter (or oldest daughter-in-law). Some women in that society claim that the availability of pre-made, store bought bread has been detrimental to women's status. There are no longer the same channels to prove themselves to their peers and other local villagers.

Many villages around the world survive on the collective efforts of many women. Women, especially of common kin, cook together and consider cooking to be a social activity. It is a source of pride and respect, a way to define the family.

When Men Cook

Despite women's dominant culinary role in the home, there are circumstances that do require men to cook. In general, when men cook, it is because they have either intentionally put themselves into isolation (camping, working in isolation) or they have fallen into extreme situations (war, natural disasters).

IMAGE 117 A barbecue competition contestant in Kansas City.

IMAGE 118 A Mongolian herdsman takes a break from his day to cook a meal. Working high in mountainous regions, isolation necessitates self sufficiency. IMAGE 119 In 1906, San Francisco suffered a devastation earthquake. Many were forced to live on the streets. This man rigged up a temporary stove.

In more recent times, especially in affluent, industrialized societies, there are many men who enjoy cooking as a hobby. For this contingent of men, cooking is a relaxing activity, a way to express themselves creatively. Other men liken cooking to a sport. Competitive barbecuing, for example, is a thriving community of mostly men who grill meat and take great pride in refining their recipes.

1850 - 1900:
New Technological Developments

The Industrial Revolution heralded in era of new technologies of which women and kitchen life benefited. During this time period, most kitchens were made up of an open re hearth, heavy cookware, shelving and wooden tables. In rural areas, homes were one room living quarters, making the kitchen, the space where the entire family ate, slept and worked. Wealthier families may have been able to afford servants, but nonetheless, women often spent their entire days in the kitchen.

Ideas about the relationship between kitchen spaces and tools and appliances started to take shape during the 1860s. Innovative new tools and kitchen concept ideas flourished. Catherine Beecher included a discussion of the continuous countertop in her 1869 book The American Woman's Home although its implementation did not occur until the early 1900s.

Innovations + Tools

An abundance of kitchen appliances started developing around the1850s. Cast iron cookstoves, having been developed over a century before, were now relatively commonplace household items, especially in urban areas. Small and portable, they were easily operated by coal or wood without requiring any heavy lifting. With such innovations, the way housewives cooked and planned their meals changed.

In addition to the cookstove, many new cooking tools were invented during this time period including the mechanical refrigerator (1861), the eggbeater, the can opener (1870s) and the aluminum sauce-pan (1890s).

IMAGE 121

IMAGE 120 Woman cooking on an early cookstove, 1860.

Advertising

As manufacturers developed new technologies, they also learned the value of marketing to homemakers, most of whom made the important food and kitchen related financial decisions.

IMAGE 122 Advertisements for early kitchen tools were targeted for the female homemaker.

Floor Plans

The homes of the wealthy included large kitchen facilities run by an extended status of cooks and house servants. These kitchens were found in the lower regions of the home where it was cooler. At this point, no one had developed a system for planning efficient kitchens for a small family home.

Materials + Color

During this early period in kitchen history, nearly all appliances were made from cast iron. Eventually, more tools were made from aluminum. Color considerations were necessity driven. Black, natural wood color, grays were the default colors in the kitchen.

IMAGE 123

Stylistic Influences

With Queen Victoria reigning as the British monarch for nearly 70 years, the Victorian style, with heavy ornamentation dominated during this time period. The development of steam-powered ships and railways marked the oncoming of the second wave of the industrial revolution in the 1850s and 60s. The American Civil War also influenced the way people thought about technology.

IMAGE 124 An example of an early cookstove made from cast iron.

1900 - 1920: The Kitchen Space Redefined

The concept of the modern kitchen started taking shape by the turn of the century. By this time, designers were already speculating on the kitchen of the future, and the technologies that could innovate and streamline the cooking process. Prior to this point, kitchens were made up of separate units, each with different functions. As the idea of the kitchen continued to develop, an interest in incorporating new materials and technology persisted. The political climate encouraged socialist style experimentation which influenced some designers to re-conceptualize home and kitchen life.

Innovation + Tools

By the 1920s, nearly every kitchen had an ice box and pantries were filled with store bought, pre-packaged food. Kitchens were still, however, made up of several separate kitchen units, usually a wood burning stove, a stand alone sink, a hot water tank and a wooden table for cutting and organizing food. Linoleum covered some kitchen floors.

IMAGE 125- A kitchen from the year 2000 as imagined by an illustrator from 1900.

Materials + Color

Continuing the trend of past decades, the early twentieth century kitchen, cookstoves made from cast iron continued to dominate the kitchen along with wood tables and white ceramic sinks. By the late 1920s, color was being introduced into the kitchen. Linoleum was a new material used to cover kitchen floors.

IMAGE 126 An early kitchen features individual stand-alone units of varying heights.

Stylistic Influences

After World War I, the political climate encouraged a socialist outlook, one that celebrated the worker. These ideas, most dominant in Germany and Austria, were also being explored in large urban American cities including Chicago, San Francisco and New York. Stylistically, Edwardian influences were still apparent but schools like the Bauhaus in Germany were revolutionizing the way designers approached arts, crafts and architecture.

IMAGE 127 By the late 1920s, color was being introduced into the kitchen.

Socialist Housing's Centralized Kitchens

One of the first individuals to Re-conceptualize the entire idea of the kitchen was Otto Bauer. In 1919, Bauer, a leader of the Austrian social democratic movement, introduced the idea of communal housing, known in Vienna as "Gemeindebauten." What made these socialist, multi-unit housing complexes particularly novel was the inclusion of centralized, communal kitchen and laundry rooms.

Communal playrooms and classrooms accommodated the children of the complex while dining rooms, reading rooms and game rooms were added for adults. By 1923, Otto Neurath declared socialist housing with communal kitchen facilities to be the wave of the future. The Einkuchenhaus (meaning, central kitchen house), realized in 1926, complete with central kitchen and dining area was considered to be a particularly "luxurious" housing complex. It was built for families with working mothers but the rent and service costs were, in actuality, too expensive for working-class families.

IMAGE 128 Frigidaire Refrigerator advertisement from 1926.

The kitchen, where multiple individuals cooked for the entire housing complex, was located in the interior courtyards of the building. Some women complained that they felt isolated with such a layout. Later Gemeindebauten took into account criticisms of previous socialist housing by relocating the domestic work sphere to the periphery of the buildings. In these newer complexes, women working in kitchens and laundry rooms were visible from the outside. They were, in a sense, now interacting with the public space. The facilities were said to be airy with modernized equipment and they were all installed with running water, gas and electrical capabilities.

1930 - 1950: The Beginnings of Modern Conveniences

By the 1930s, the idea of the kitchen as a place for a woman's personal expression really started to take root. It was also a period of major kitchen innovations. As such, kitchens became more streamlined and multi-purposed. Advertisers and manufacturers encouraged women to color coordinate the kitchen and take advantage of the conveniences of modern technology. Although the US suffered through the 1930s with the Great Depression, by the 1950s, American domestic life and kitchen consumerism reached its peak. Kitchen culture flourished with new gadgets, technologies and idealistic visions of the future.

IMAGE 132 The Kelvinator refrigerator includes double the cooling capacity of other refrigerators of the time according to this 1937 advertisement

Materials + Color

Kitchens in the 1930s included many coordinating colors and patterns that referenced the Art Deco movement. Bold colors like red, yellow and blue were used together against neutral white, tan and black backgrounds. Brightly colored accessories like canisters and tea service caddies were placed as accents through-out the kitchen. The use of linoleum floors continued.

IMAGE 134 A kitchen from the 1930s reflect a color palette influenced by the Art Deco movement.

By the 1940s, many kitchens were fitted with metal cabinets (often painted white). Kitchens were emboldened with brighter, more contrasting colors like strong reds, greens and yellows. By this point, kitchens became more streamlined and less reliant on artistic ornamentation. The use of continuous counter surfaces, wall mounted cabinetry and kitchen floor planning were this time, commonplace.

During this time period, tin, chrome-plating, stainless steel and brass were materials incorporated into the kitchen tools manufacturing press. Rustproof kitchen tools and cutlery were developed in the 30s. By the 1950s the color palette included lots of pinks and turquoise.

IMAGE 135 Marcel Breuer's Bauhaus kitchen from 1923 influenced the streamlined kitchen of the 30s and 40s.

Stylistic Influences

The 1930 – 1940s was a period of major innovation and change. Kitchen technology and style reflected every-thing from Ford's assembly line process to the Art Deco movement and Frank Lloyd Wright.

In Germany, however, the Bauhaus movement encouraged a design approach free from extraneous details and over-exaggerated uses of color. In line with the Bauhaus school, Marcel Breuer created a kitchen without ornamentation and sweeping countertops. He also was the first designer to include wall-mounted overhead cabinets into the kitchen.

IMAGE 136 The 1940s kitchen included white cabinetry made from metal and little ornamentation.

Russel and Mary Wright revolutionized tabletop design with their sleek, modernist aesthetic in the 1940s. The concept behind their designs related to the new relaxed life style following World War II.

IMAGE 137 Russel and Mary Wright's dishware appealed to the post-WWII American seeking a simple and relaxed lifestyle.

IMAGE 138 1948 General Electric refrigerator advertisement

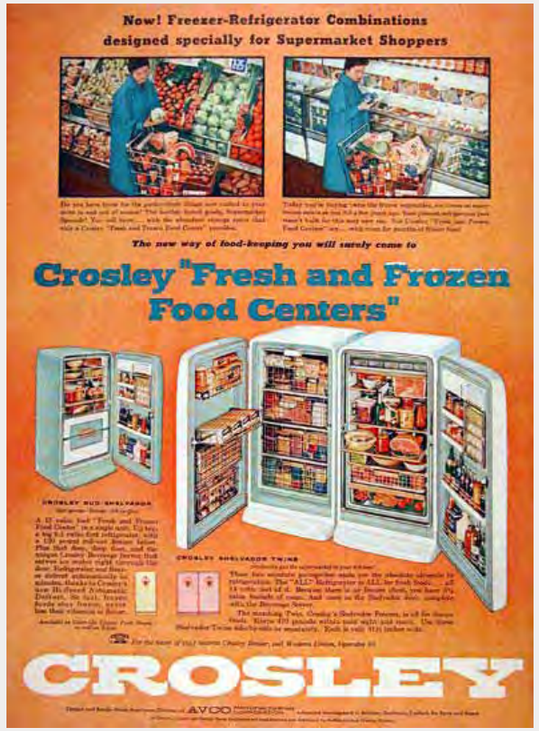


IMAGE 139 A Crosley refrigerator advertisement from 1956 boasting side-be-side refrigerator and freezer units.

Kitchen Layout

Designers and engineers began experimenting with kitchen layouts as soon as kitchens started to include more appliances. What they attempted to do was find the most efficient way to maneuver from one appliance to another. In 1949, Alfred Levitt, in a radical move, switched the kitchen from the back of the house to the front to create greater efficiency for the housewife. The concept did not have much longevity.

During the 1950s, architects and builders attempted to create more integrated living spaces with open plans. The idea appealed to many housewives who wanted to complete their chores and still interact with family members in adjoining rooms.

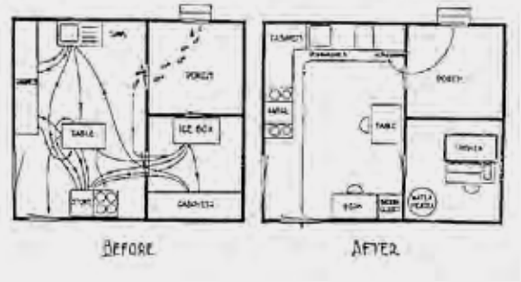


IMAGE 140 1936 floor plans show before-and-after kitchen renovations. The new plan includes a continuous kitchen.

IMAGE 141 The diagram to the left shows the difference of laying out appliances further away from each other versus placing them closer together.

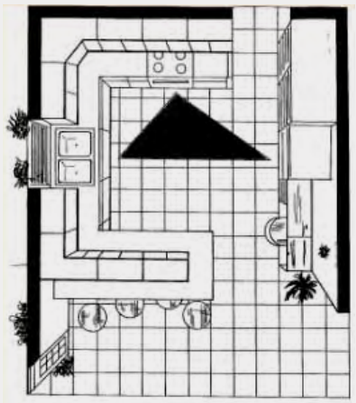


IMAGE 142 In the early 1940's, the triangle method of organizing kitchen appliances was found to be the most efficient. The three defined areas include storage and preservation, cleaning and preparation, and lastly cooking and serving. The triangle relationship shown here represents the three most used appliances such as sink, cooker, and refrigerator.

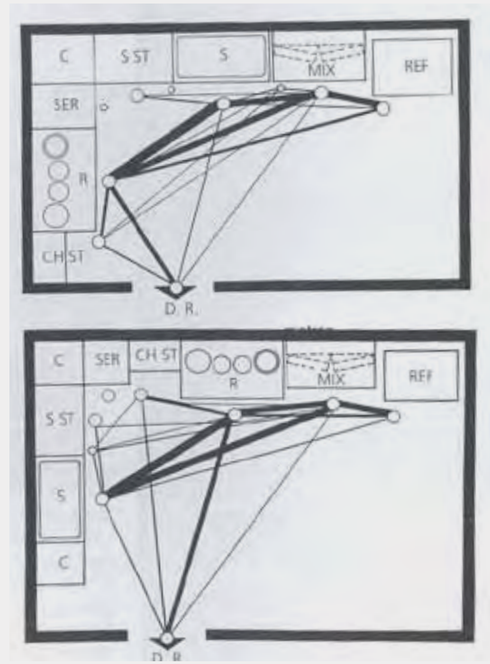


IMAGE 143 Travel lines are shown here in two different kitchen layouts. Walking through the lower plan requires the user to walk 29 yards more than the top plan.

Innovative Appliances + The Future Kitchen

Frigidaire continued a vision of “the kitchen of the future” in 1957 complete with fully automated appliances. Several technological innovations Frigidaire predicted are actually currently under development. A “machine” in your kitchen that stores recipes, advises you with dinner options and balances your check book is feasible with the Internet and smart refrigerators. However an automated contraption that accepts food orders, prepares dishes and then replenishes its stock of ingredients in minutes is still strictly fantasy.

Many of the innovations during the period involved refinements to the refrigerator. Ice trays, stainless chromium shelves, glass topped food hydrators, and greater energy efficiency.

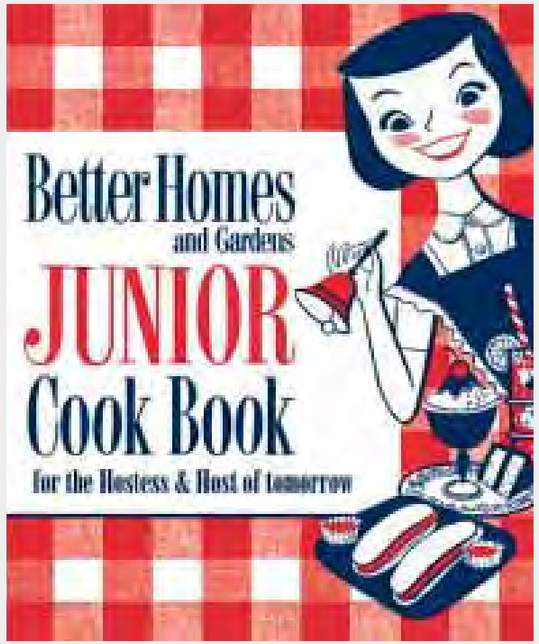


IMAGE 144- Juvenile cookbooks from the mid-twentieth century encouraged gender differentiation, especially in the kitchen.

IMAGE 145 Frigidaire’s 1957 Kitchen of the Future envisioned some of the technology currently under development today.

1960s - 1980s: The Established Kitchen Environment

By the 1960s, kitchen appliances and their configurations within the kitchen were well established. Innovations were more materials based. Kitchen styles, colors and trends were turning to more personal, individualized tastes. As more and more women held full time jobs, kitchen spaces changed to accommodate the professional women who wanted to spend as much time as she could with her family.

IMAGE 146 The microwave became a common kitchen appliance by 1975. Affordability and new technological advancements led to consumer interest.

IMAGE 147 An advertisement from the 1960s promotes a Tappan gas range.

Innovation + Tools

Although Percy Spencer invented the microwave in 1946, acceptance of the new technology took several decades. It was not until 1975, when the microwave, due to technological advances as well as an affordable price tag, was finally embraced by the average consumer.

Other innovations included the first self-cleaning oven (1967) and the first through-the-door refrigerator ice and water dispenser. In the 1980s dishwashers were more commonplace and refrigerators were equipped with a beeping mechanism that alerted users when the kitchen door was open. The garbage disposal was also another popular 1980s kitchen innovation.

Materials + Color

The concept of the “state-of-the-art” kitchen developed in the 1960s.

Formica started to be used to make cabinets and countertops. Hard wood continued to be used including walnut, oak and cherry. Historic or geographically themed kitchens gained in popularity during this time, including, for example, Venetian or Riviera.

A trend of the 1970s was the second recreational kitchen, most commonly used by men to clean hunting and/or fishing game. Fashionable colors of the 60s and 70s included avocado greens and golds although styles and colors varied widely. The use of plastic laminate countertops and wood paneling were common.

The kitchen color palette became much more neutral by the 1980s. Kitchen cabinets were usually made from a treated hard wood such as oak. Some kitchens included wall-to-wall carpeting however linoleum or ceramic tiling was more common.

IMAGE 148

IMAGE 149, 150 Kitchens in the 1970s were dominated by avocado greens, golds, wood paneling and plastic laminate counter tops.

Stylistic Influences

America was infatuated with the space age during the 60s and 70s. Neil Armstrong landed on the moon in 1969 and movies like 2001: A Space Odyssey (1968) and Star Wars (1974) captured the cultural zeitgeist. Perhaps this explains the resurgence of future kitchen technology during the 70s.

By the 1980s, it was economics that influenced changes in the home. As more and more women worked full time, kitchen spaces opened up and walls were removed so when the professional mom was at home in the kitchen, she could also spend time with her family.

IMAGE 152 The 1980s included kitchens with a neutral color palette and an open floor plan.

IMAGE 151 An advertisement from the 1970s feature avocado green appliances, a popular color of the era.

Future Innovations

During the 1970s an interest in environmental concerns led to the development of a concept solar powered home. The kitchen's appliance all ran on solar power energy. Other concepts developed in the 70s included a computerized sink, a computer to help the housewife plan menus and maintain the budget and a "Homemaker's Command Post."

IMAGE 153 This energy conserving kitchen relies on solar power. The skylights filter out undesirable solar rays while panels on the roof collect enough energy to heard and cool the house, year round.

IMAGE 154 The sink of the future, as conceptualized by Elkay in the 1970s, includes spaces for food preparation, cooking and clean-up. It also integrated a small TV and a small computer.

IMAGE155 Westinghouse developed the "Homemaker's Command Post" which centralized door and window locks, and stored up to 500 phone numbers.

IMAGE156 Honeywell imagined a homemaker planning menus and maintaining the family budget on this fiberglass "computer."

Today's Kitchen

In more recent times, kitchens have returned to it's utilitarian beginnings, although with a modernist's edge. The clean lines from the 40s and 50s reappear, influenced by the appliances and countertops of commercial restaurant. Kitchens continue to be dominated with stainless steel appliances and fixtures and an abundance of kitchen tools, made from steel and more recently, silicone rubber, flood the market. The kitchen is less of a space divided by gender and is more equally enjoyed and used by men and women alike.

IMAGES 157, 158 This collapsible strainer is one of many recent cooking tools made from silicone rubber. Halogen ovens, made from recently developed technology cooks food quickly with oven-roast results.

Innovations + Tools

There is no shortage of innovations in today's kitchen industry. New features and tools are emerging at an accelerated pace as materials and technologies continue to evolve. Pot fillers which originated in the commercial kitchen, allow users to fill pots with water directly on the range. The halogen oven cooks food as quickly as the microwave but the resulting food tastes similar to a standard oven cooked meal. Dish drawers are being promoted as practical and easy-to-use dishwasher option that stores dirty dishes in one drawer and cleaner dishes in another. Silicone rubber tools are becoming more common as the heat resistant, manufacturing friendly appeals to practical and cost-conscious consumers.

Colors + Materials

Most luxury kitchens include stainless steel appliances, stone or wood butcher block counter tops. Although stainless steel appliances dominate the current market, appliances continue to be available in a wide array of colors, from bright green, yellow and red to neutral blacks and white. Kitchen space color palettes also vary according to personal style. Color trends, however, generally seem to include different intensities of the same hue.

IMAGE 159 Pot fillers originated in commercials kitchen and have only now started entering domestic kitchen spaces.

Stylistic Influences

Kitchens in today's home vary in style. Country or retro kitchens continue to be popular, however, the dominant trend remains the stainless steel, industrial style kitchen. Modern with clean lines and utilitarian functioning, the refrigerator, stovetops and sinks are generally oversized like commercial kitchen grade restaurant appliances.

Food Presentation Trends

As our tastes for food have become global, we are becoming more interested in other cultural methods of preparing and presenting foods. Japanese sushi requires particularly exacting presentation techniques.

IMAGE 160 Dish drawers innovate the standard dishwasher by keeping clean dishes in one drawer and dirty dishes in another.

IMAGE 161 Modern kitchen color palettes tend to integrate different intensities of the same hue.

A successful presentation includes careful consideration of color, shapes, textures, portion size, flavor and temperature. Each of the foods on a plate should balance by taste and appearance.

Presentation can include flourishes called garnishes which are edible, complimentary elements. Lemon zests, sauces and herbs are common garnishes.

A current presentation trend includes food presented plainly on a plain white plate. In this way, food is presented in an honest and humble manner, where the flavors and textures of the food become the focus rather than aesthetic presentation.

IMAGE 162 More homeowners want to create the style and environment of industrial commercial kitchens.

IMAGE 163 Today's kitchen include airy spaces and features like butcher block counter tops and stainless steel appliance. Colors and stylistic influences vary.

Luxury Foods

Luxury foods exist in all cultural cuisines. They can be defined as gourmet, generally rare, hard to prepare, dangerous to eat and/or expensive foods.

Examples of luxury foods include the Japanese fogu fish (a poisonous blowfish) that must be prepared by a trained chef. One who eats the sh risks dying from the poison. Saffron and truffles are also luxury foods due to their rarity and are exceptionally expensive. Luxury foods also can include dishes prepared with unique or unusual combinations.

IMAGE 164 Japanese maki rolls and sushi require special preparation. Particular attention is paid to its aesthetic preparation.

IMAGE 165, 167 Fogu fish, saffron and game meat are all considered luxury foods.

The Layout of the Kitchen

Kitchens are used to prepare food. The layout and area of the kitchen depended on the design of the area where the kitchen would be located. There are different types of arrangements of the kitchen that consist of kitchen cabinets, sink, stove, and refrigerator.

One of the arrangement is the single kitchen or the one-way galley which has everything along one wall. This solution would be used if the space was restricted. This may be common in an attic space that is being converted into a living space, or a studio apartment.

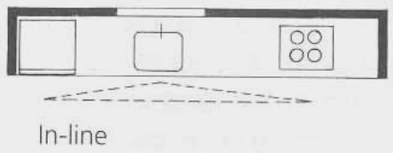


IMAGE 168

The double-file kitchen or two-way galley has two rows of cabinets at opposite walls, one containing the stove and the sink, the other the refrigerator. This is the classical work kitchen.

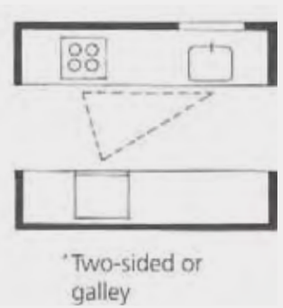
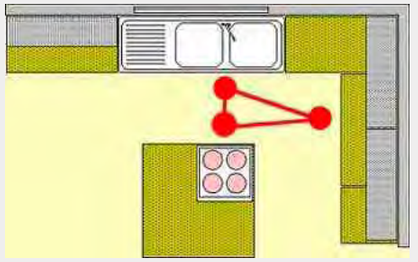


IMAGE169



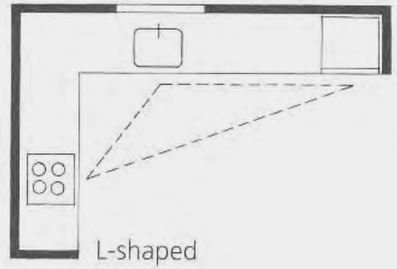


IMAGE 170 In the L-kitchen, the cabinets occupy two adjacent walls. The work triangle is preserved, and there may even be space for an additional table at a third wall provided. It doesn't intersect the triangle.

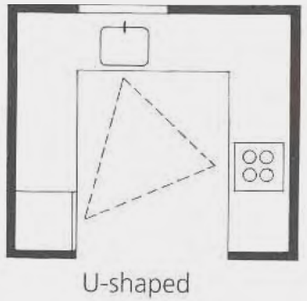


IMAGE171 A U-kitchen has cabinets along three walls, typically with the sink at the base of the "U." This is a typical work kitchen, too.

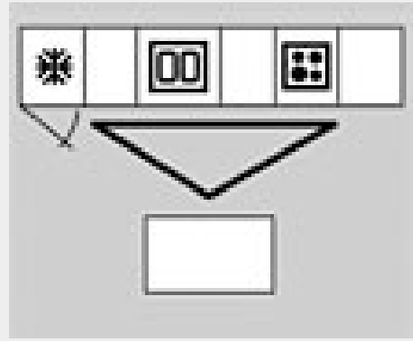


IMAGE 172, 173 The block kitchen (or island) is a more recent development. This would appear in kitchens that are available in open space. Here, the stove or both the stove and the sink are placed where an L or U kitchen would have a table, in a freestanding "island," separated from the other cabinets. In an open kitchen, it would make the stove accessible from all sides such that two persons can cook together, and allows for contact with guests or the rest of the family.

Different Kitchen Layouts in Present Time

Apartments

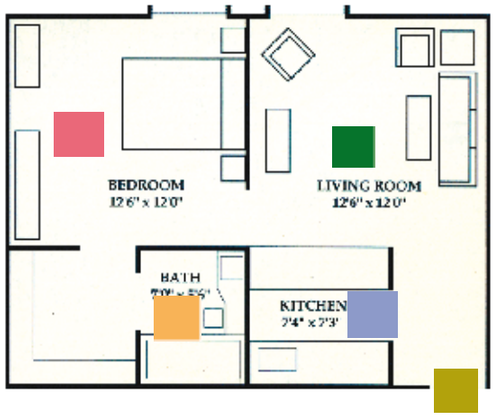


IMAGE 174 You can see that upon the entrance of the apartments, the first room is usually the kitchen and then the dining/living room.

IMAGE 175 Studio lay out

IMAGE 176 Housing layouts usually have the dining room before the kitchen so that any guests or house member traveling in through the entrance would not interfere with the kitchen.

IMAGE 177 For this particular layout, the kitchen is placed on its right but with a hall way that directly leads to the living/dining room instead of opening in to the kitchen.

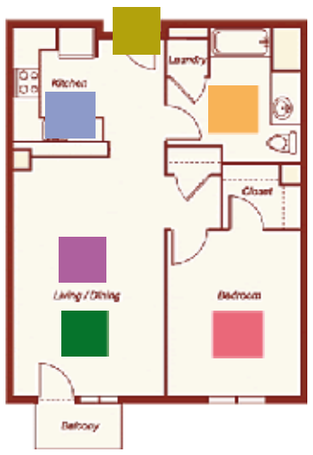


IMAGE 178

kitchen
dining room
living room
bedroom
bathroom
garage
entrance

Two-Story Homes

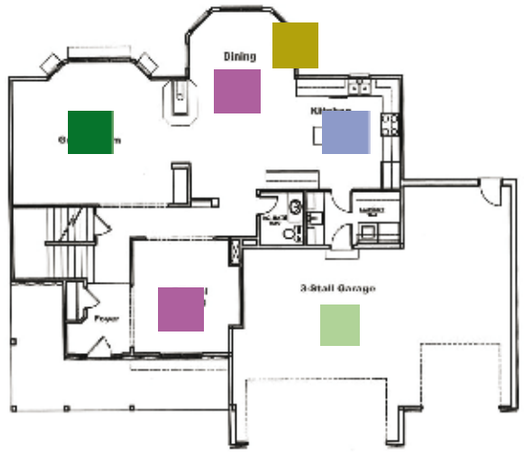


IMAGE 179 For this two story home, the kitchen is located right near the garage for better transport of groceries from the vehicles. Typically, the ground floor would be where the kitchen and living is located.

Brown Stones

kitchen

dining room

living room

bedroom

bathroom

garage

entrance

IMAGE 180 Typically, the ground floor would be where the kitchen and living room is located.

One-Story Homes

IMAGE 181 For this one story home, the kitchen is adjacent to the dining room.

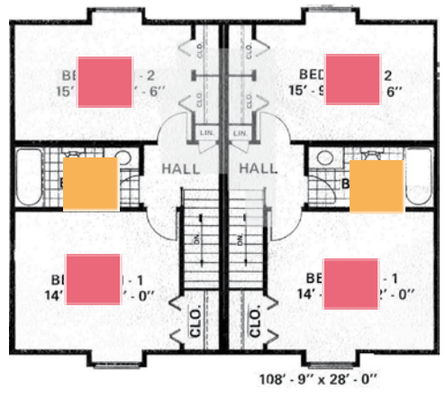


IMAGE 182

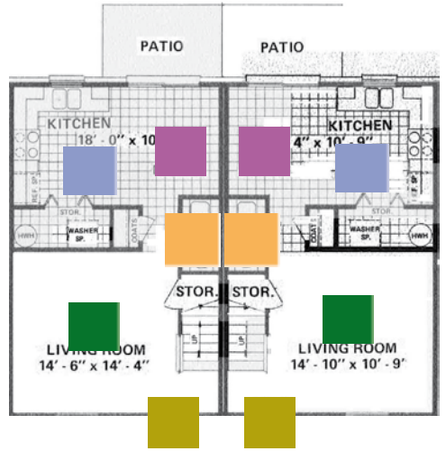


IMAGE 183 For this Townhouse layout, the kitchen is located to the patio side so that there will be better supervision if children are around. Or, it may be good for easy patio access for outdoor cooking

The Future Kitchen

The kitchens of the future, as we imagine them today, rely on computer based technologies, hidden features, new or recycled materials and an interest in renewable energy. Some designers have focused more on materials and form while others have based their vision on techno-logical advancements.

Future kitchen concepts continue to include an airy, large multi-functional environment for recreation, work and play. The activity of cooking becomes just one more option to consider in the kitchen.

tor" that keeps leafy greens and herbs fresh as well as a "warm compartment" within the refrigerator with a special atmosphere that prevents the oxidation of fruits and vegetables. He also envisions kitchen appliances with touchscreen displays. Computer monitors will be built into kitchen units to provide the convenience of instant access to information.

Innovators at GE have developed kitchens with "predictive computing" to anticipate the needs of its users. The kitchen will be linked to the Internet and all other

IMAGE 184 A future kitchen include integrated technological innovations rather than large stand alone computer units as envisioned in the 70s.

Technology

"Historically, technology has entered the home through the kitchen," says Ted Selker, an associate professor at MIT whose lab explores the technology of future kitchens. His proposed technology includes a "hydroponic cupboard with an ultrasonic evaporasystem operations in the house. Organic light-emitting diodes (OLEDs) will illuminate the kitchen from fabric ceilings or even the floor, without glare. Light switches will become unnecessary as smart lighting will detect when a user is coming or going. The entire kitchen surface will be touch sensitive with "multiple levels of interaction" and "complex information navigation" capabilities. GE also envisions clean, bacteria free water purified via ultraviolet light

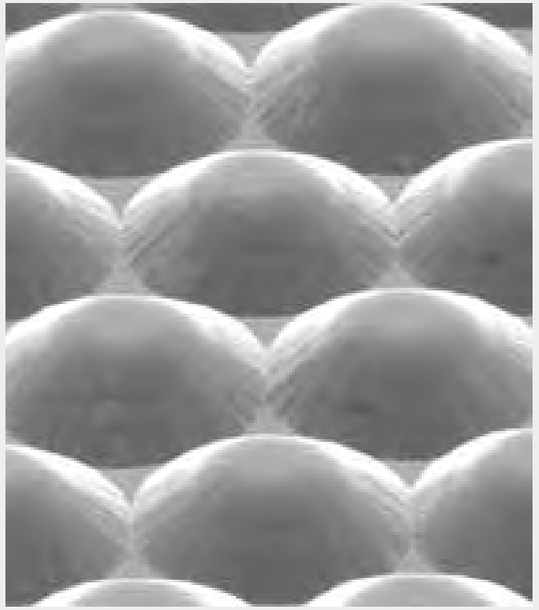


IMAGE 185 OLEDs

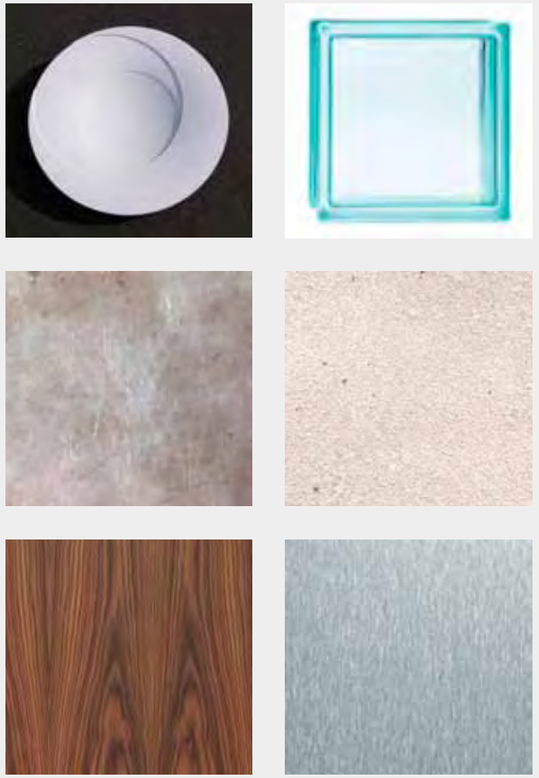


IMAGE 186

Materials + Resources

Future kitchens will be made with locally produced materials (if possible, within 300 miles, to reduce the carbon costs of transportation). Kitchen manufacturers will be more aware of protecting resources and will use materials from managed forests and recycled glass, plastic and paper. Kitchen sinks may also be made from silicone rubber which withstands great heat and absorbs or prevents breaking glasses and dishes. Water conservation will be an increasingly important issue; future kitchens will include adjustable height sinks with two taps; one for drinking and cooking water, the other that funnels in recycled rainwater. All appliances will include water conserving technology.

Appliances

Smart technology will be incorporated into most appliances. A kettle, for example, will include a display that will inform users how much time is left before the water boils. Refrigerators with built in video cameras and monitors will notify users of what to add to their grocery shopping lists. You will also be able to call your refrigerator to nd out what you have on hand for dinner or leave reminder messages to yourself or to family members. The cooktop will be self-cleaning on command.

Design Trends

The kitchen is being viewed less as a utilitarian space and more like the nucleus of family life. Kitchens will reflect this concept, accommodating multiple activities, users and needs. The dominant themes are warmth, comfort and personalization. Families will congregate in the kitchen rather than the living room for entertainment, work and socializing.

IMAGE 187 Appliances will integrate technology that interacts with users, home systems and the internet.

IMAGE 188 Ernestomeda's Solaris is a counter top, cooking unit and a worktable with a built-in sink and burners.

Integration

Future kitchens will link multi-functional products and appliances with interactive controls. Some designs appear to take on a linear monoblock approach. Other kitchens emphasize the unique qualities of furniture styled units.

IMAGE 189 GE's concept kitchen relies heavily on new methods of technology integration, energy efficiencies and water conservation.

IMAGE 190 Verve by Ernestomeda plays with surface, reflection and light, intersecting the kitchen's environment with its interior cabinet space. The reflection of the kitchen accents the surface of the cabinets while the cabinets' contents are just visible through the frosted glass doors.

Hidden Features

Doors slide open to reveal hidden cutting boards, burners, hardware and joints. Invisible sensors reveal faucets, turn on lights and open doors. Space and surface, rather than features, become the focal point.

IMAGE 194 Minotti introduced the monolithic Terra kitchen in 2004. Its approach is to hide all evidence of the kitchen until it actually needs to be used.

IMAGES 191, 193 Bulthaup's b3 kitchen units' handle-free doors and hidden joints enhance the stainless steel and glass surface.

IMAGE 195 The Bo Zone kitchen hides appliances and shelving behind sliding co-planar doors (opening like an accordion). The kitchen's other functional elements are also concealed until needed. Door handles are "invisible" and a stainless steel work-top appears to oat on top of its aluminum frame. A "blu-motion seal-mechanism" imbedded into the cabinetry ensures that doors will shut quietly.

Sculptural

Uniting new technology with futuristic forms, several kitchen manufacturers are developing kitchen units with sculptural elements. These units incorporate the functionality of a standard technologically enhanced kitchen but push the boundaries of what kitchen units can or should look like.

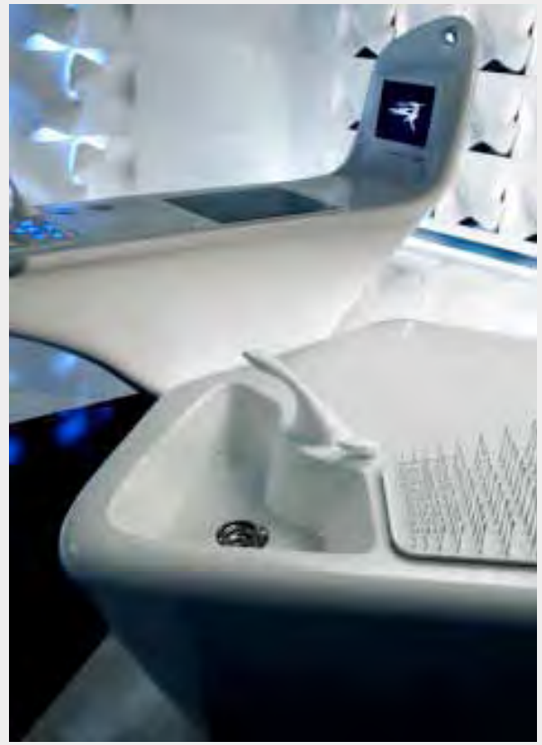


IMAGE 196 Zaha Hadid, in conjunction with Dupont Corian and Ernestomeda, created Z. Island, a kitchen with two free standing units. The "Fire" unit includes a cooktop stove and multimedia technology. The hexagonally shaped "water" unit comes with a sink, built-in drying rack and dish washer.

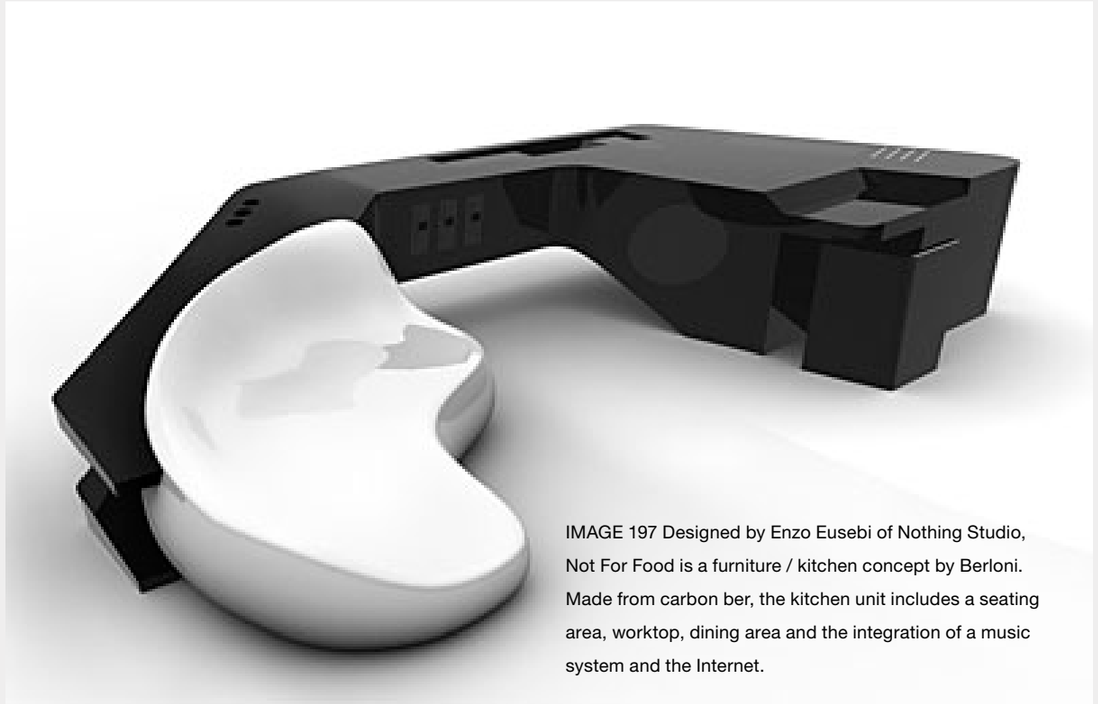


IMAGE 197 Designed by Enzo Eusebi of Nothing Studio, Not For Food is a furniture / kitchen concept by Berloni. Made from carbon ber, the kitchen unit includes a seating area, worktop, dining area and the integration of a music system and the Internet.

IMAGES 198, 199 Strato Cucine created “Unique Pieces,” a kitchen made primarily from polished and opaque steel. The kitchen stresses the importance of aesthetics in even the most utilitarian settings.

Unique Surfaces

Although most kitchen are still dominated by the use of stainless steel or wood, a few kitchen designers are experimenting with new and different surface textures and materials. DuPont’s corian looks like stone but embodies the durability of more traditional materials. Other interesting options include glass, fabric, plastics and carbon fiber.

IMAGES 200, 201 Santambrogiomilano’s Simplicity Project is one of the first kitchens to make use of the transparent quality of glass to highlight its everyday uses. With glass as their backdrop, water and re seem to oat in mid air.

IMAGE 202 Using Brazilian Sukupira wood and bronze metal, Armani Casa’s Bridge kitchen was created to showcase the beauty of the materials on one side and the functionality of the kitchen on its reverse.

IMAGE 203 Venus’ by Pininfarina’s innovative use of coral red steel counter tops create a desirably touchable surface. It’s “microtouch” finish in microfiber has a unique leather-like feel.