

## Global Flavor Notes

# Rice on the Rise

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If man cannot live on bread alone, he probably can make it on rice. It is an excellent breakfast cereal, nutritious soup, a good component of salad for lunch, or a main meal for dinner along with rice wines. Rice pudding can also be a sumptuous dessert.

Worldwide per capita consumption of rice is approaching that for wheat; rice is about 80 kg compared to wheat at about 96 kg. The popularity of rice varies among the regions of the world (Figure 1 and Table I), as do the ways in which it is prepared and used.

"Tung goh shik fun," meaning "Come eat rice with me," is the most gracious expression of Chinese hospitality; and "Have you eaten your rice?" is a common Chinese greeting. They don't "break bread;" they would rather eat rice together. Some Far Eastern fairy tales conclude with the saying, "Their rice bowls overflow ever after." And in some stories, to upset a bowl of rice accidentally is a sign of misfortune.

The western world's habit of showering rice on the bride and groom for good luck probably originated from legend-

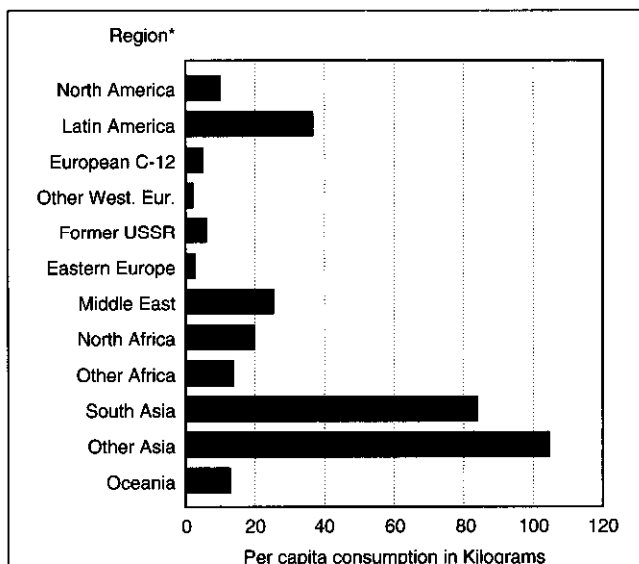
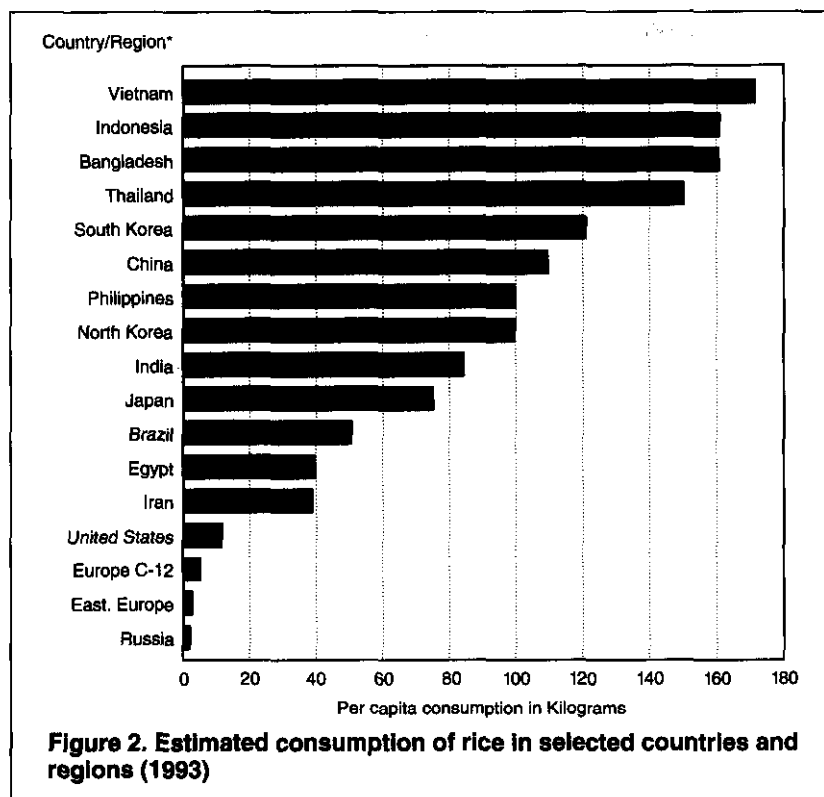


Figure 1. Estimated world rice consumption by region (1993)

Table I. Regions defined for this article

<b>North America</b> Canada Mexico United States <b>Latin America</b> Central America the Caribbean South America <b>European Countries (EC-12)</b> Belgium Denmark France Germany Greece Iceland Italy Luxembourg Netherlands Portugal Spain United Kingdom	<b>Other Western Europe</b> Austria Azores Cyprus Finland Iceland Malta and Gozo Norway Sweden Switzerland <b>Eastern Europe</b> Albania Bulgaria Czech Republic Hungary Poland Romania Slovakia former Yugoslavia	<b>Middle East</b> Bahrain Iran Iraq Israel Jordan Kuwait Lebanon Oman Qatar Saudi Arabia Syria Turkey Yemen <b>North Africa</b> Algeria Egypt Libya Morocco Tunisia	<b>Other Africa</b> Includes all African countries except those listed for North Africa <b>South Asia</b> Afghanistan Bangladesh Bhutan India Nepal Pakistan Sri Lanka <b>Other Asia</b> Includes all countries in Asia except those listed for South Asia <b>Oceania</b> Australia Fiji New Zealand Papua New Guinea
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ary stories of Chinese sorcery and Arabian beliefs that rice grains placed on a roof preserved all from misfortune.

It is little wonder that many people think rice is sacred. Rice is believed to create a precious bond between God and earth, thus inspiring so many ceremonies and legends. In Japan individual rice fields are given names as if they were persons. In Thailand as the grain is ripening, farmers place bamboo poles in paddies to signify that Mother Posop, their rice goddess, is pregnant. The Hindu culture also named a goddess after their rice. Harvest is a time of celebration in several Asian countries, calling for far more jubilant festivities than Thanksgiving in the United States.

With more varieties than the population of Monaco-Ville and a thousand-and-one recipes to add life to it, rice has certainly surpassed pasta, for its good taste and health value, as a popular complex carbohydrate. Just rediscover rice through its "aromatic" varieties. They come in brown or white with a fragrant corn or nut-like aroma and flavor. The U.S. varieties are known as Texmati, Delta Rose, Delta Gourmet, Popcorn, Wild Pecan and Wehani. They are treated with no less respect than wine, and connoisseurs claim that their aromatic properties vary from year-to-year and even improve with age.

In households from many countries, a day never passes without a bowl of rice appearing on the table (Figure 2). Not only is it considered a necessary staple, but it also reflects cultural preferences.

To emphasize the importance of rice in some cultures, just consider that Japan's recent decision to end its prohibition on the sale and possession of foreign rice had a signifi-

cant impact on Japan's people and their basic beliefs. In South Korea the prime minister lost his office in a dispute over importing foreign rice.

Rice stimulates various countries' artistic moods as it presents itself in the colorful Spanish paellas, the creamy Risotto Milanese of Italy and the pearly smoothness of the intricately designed pressed rice sushi of Japan. The delicious fried rice of China, the spicy Creole jambalaya of New Orleans, Louisiana, in the U.S. and the Indian curry represent a few of the international dishes prepared with this versatile grain.

### Brief Notes on History

The Chinese claim to have cultivated rice for the last 5000 years (and may have been the first to do so). Legend has it that the Chinese Emperor Shen Nung was the only person allowed to plant the most sacred grain, rice, and this was done in planting ceremonies. All others, from members of his entourage to lower ranking officials, could plant only soy and other beans. However, other historians believe that the Bengalese, in about 3000 B.C., were the first to learn that the grain, growing wild in the hot, moist swamps of Southeast Asia, could be cultivated.

The first recorded rice plantation in the U.S. existed in the South Carolina swamps. The seeds were received as a gift from a Madagascar ship in return for good, southern hospitality.

### Cultivation

No grain yields more sustenance per acre of land; yet no crop requires more labor for its cultivation.

Scientifically christened as *Oryza sativa*, rice thrives on flooded fields simulating swamps, with plenty of sunlight and warm temperatures (60°-80°F) with the exception of a few varieties. Rice, like any other grain grown on stalk-type plants, can be harvested after the fields are drained and allowed to dry. Golden sheaves, ready to thresh, are knocked off the stalks and further dried. Afterwards, the hulls are pounded loose from the kernels. Winnowing follows; this is the process of removing the chaff from the grain. At this point the rice is brown due to the bran layer which is polished off by milling. Although bran contains valuable vitamins and minerals, it makes rice less tasty, requires a longer cooking time and is less shelf stable. In the United States, rice is parboiled before polishing. This process allows some of the soluble vitamins and minerals in the bran to permeate the endosperm and add nutritional value to subsequently polished kernels.

The last step in commercial processing is tumbling in glucose or talc to add the sheen that gives this precious grain the beauty of a pearl.

### Nutritive Value and By-Products

This gluten-free, energy-producing complex carbohydrate is also an excellent source of quality protein, containing eight of the essential amino acids. Its fat content is almost negligible. Unpolished, it contains vitamins E, B-complex, thiamine, riboflavin and niacin. Its mineral content includes phosphorous, iron, potassium and calcium, and it has a low sodium content.

Rice bran is rich in vitamins and minerals and is available in health food stores. Research has demonstrated that it is more effective in lowering blood cholesterol than oat bran and has double the nutrients.

The by-product of shining rice is known as "polish." It is rich in vitamin B and used in baby foods. The broken rice from the process of milling is either sold as a low quality at reduced price or used as the source for rice flour and spirits.

### Varieties and Types

Although rice appears around the world in numerous varieties, it falls into three main types: long, medium and short grain.

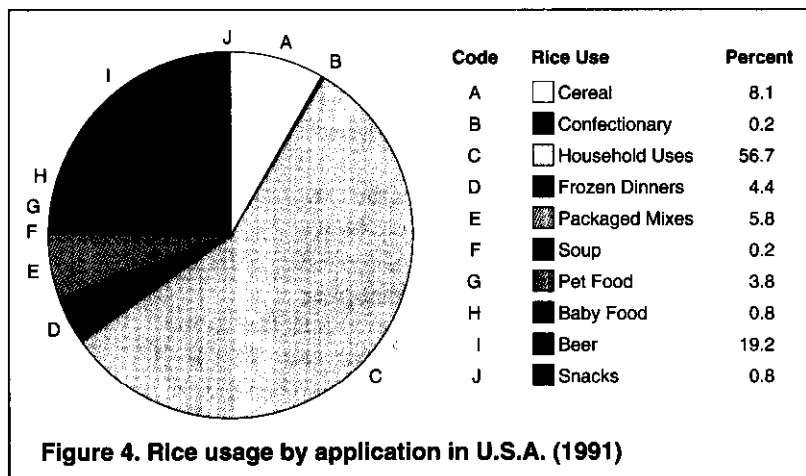
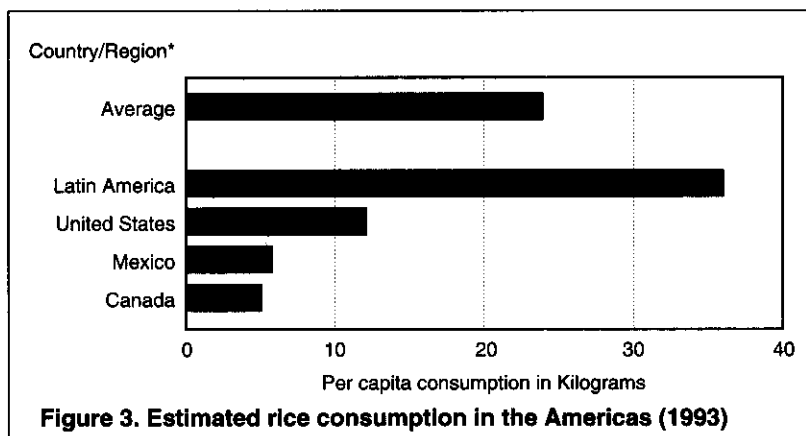
Long grain rice is four to five times as long as it is wide. It is used in recipes that require fluffy rice.

Medium and short grain rices are shorter and plumper. Medium grains are about three times their width; short grains are from one-and-one-half to two times their width.

The nutty, tasteful wild rice *Zizania aquatica* grows wild in the marshes of America's Great Lakes and is sometimes referred to as "Indian rice." However, it actually does not belong to the rice family.

Depending on how rice is processed, the following types are available:

- **Blended** is a commercial mixture of many varieties of rice, some of which have different colored bran layers. It may include black, red and orange, along with several shades of brown rice. Wild rice is included in some blends.
- **Brown** rice is the unmilled rice still containing the bran layer. It exists in various shades of brown, red or black.
- **Enriched rice** is polished rice with some nutrients added. Because it is mandatory in some states, 90% of all rice marketed in the U.S. is enriched. Instant or precooked rice is cooked while fresh, then dehydrated for rapid preparation.
- **Light or micromilled** rice is partially milled rice with some of the bran remaining on the kernels.
- **Parboiled or converted** rice is rice that is steamed



and pressurized to force the nutrients from the bran into the rice.

Rice is also available in various degrees of grind, as coarse rice, couscous, grits, meal and fine rice flour.

### Cooking the Grains

Every nationality has developed a different preference for preparing rice. Some prefer it dry, others moist, some tender, others "al dente," but none like it sticky, gummy or mushy. Oriental and other nations prefer to wash the raw rice to rid it of excess, floury starch; this results in a cleaner taste and a fluffier cooked rice.

Although it seems that rice is cooked in several different manners, various recipes can be divided into two major categories:

- The American method, which consists of boiling rice in large quantities of water and then draining it, like pasta; and,
- The second method, known as oriental or pilaf, involves cooking the rice in a measured amount of water, all of which will be absorbed by the rice.

However, when it comes to rice recipes and menus, there is a world of difference in tastes and varieties. Rice, more than pasta, is an excellent carrier for every type of vegetable,

meat, seafood, spice and herb. Its volume more than doubles, absorbing cooking liquids, thus allowing stocks, flavors and spices to fully penetrate. The results are thousands of healthy delicious dishes of savory and sweet types.

### The Americas

Figure 3 shows the per capita consumption of rice in the Americas. Figure 4 shows the ways in which rice is used in the United States.

In the U.S. and Canada, world renowned rice dishes can be had in many ethnic restaurants as well as enjoyed at home since they are available as *convenience foods in food stores*. North Americans enjoy paella, sushi dishes, Chinese fried rice and several others, adopting them as their own national dishes. However, since rice took root in the Carolinas, authentic American rice recipes did originate in the South.

A favorite dish in the Deep South of the U.S. involves making seafood soup similar to bouillabaisse, adding a heaping spoonful of cooked rice to each bowl before serving. **Hopping John** is a main meal dish served on New Year's Day in the South to create good luck in the coming year. This is a mixture of black-eyed peas and rice. Onion and bay leaf are the main flavoring items. Creole **jambalaya** is the U.S. version of paella. Although methods of preparation vary, it generally contains cayenne pepper and thyme. Another Creole dish from New Orleans is **red beans and rice**.

In Canada and the U.S., rice snacks formed into **rice cakes** are gaining acceptance. They come in an array of flavors in both sweet and savory types. Cheese, apple cinnamon, honey nut and caramel are just a few examples.

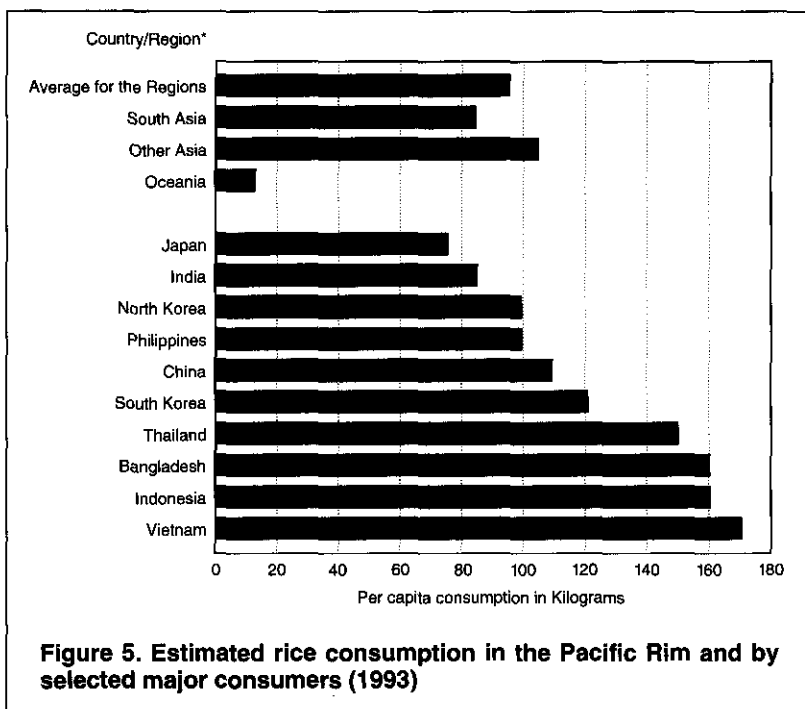
Canadian **wild rice and mushrooms** is a heavenly meal. The notes of its symphony are flavor harmonies between meat stock, mushrooms (chanterelles, if available), shallots, lemon juice, cream, thyme and dry sherry—an "Oh, Canada!" type of dish.

**Pastel de lujo** is a rice meat cake from the Yucatan. This is a two-layered baked rice-corn mixture with a meat filling inside. The meat filling has all the spices and flavors: onion, green chili pepper, pitted black olives, capers, raisins, tomato, cinnamon, allspice, clove and Madeira wine.

Further south, Mexico will offer nothing less than its famous **rice tortilla**. **Tortilla de arroz** (rice omelet) is rice pilaf mixed with eggs and milk, and cooked in an omelet pan. Color and flavors are from saffron, chilis and Monterey Jack cheese.

Mexico's mood seems to reflect in its rice dishes. Zesty herb-laced green rice is for holidays; white rice is for weddings and christenings; and the daily rice is fiery red from peppers.

Puerto Rico and Mexico have **arroz con pollo**, a deli-



cious chicken rice dish with herbs and spices all cooked together. The taste is created from a mixture of garlic, bay leaf, parsley, fresh coriander (cilantro), black pitted olives, capers, sweet pepper—what a combination! Puerto Rico's **rice guisado** is a preparation close in flavor and texture to paella with spices of bay leaf, chili peppers, cilantro and the flavor of chorizo sausage and lime.

A Latin American main meal can consist of cooked, ready-to-eat congo or pinto beans served on top of cooked rice.

Central America should receive first prize for its rice beverage **horchata de arroz** (also known as chicha). This rice cooler is *deliciously concocted* by soaking rice in milk that is subsequently homogenized, strained, sweetened with sugar, and then flavored with almonds, cinnamon and vanilla.

**Pelau** is the dish named for Caribbean chicken and rice with pigeon peas. To flavor it, one uses onion, bacon, celery, sweet pepper, hot chili, garlic, chives, thyme, cayenne, sugar and, of course, coconut milk!

Cubans finish cooking their rice in ovens and serve it with many meals such as **Cuban stew picadillo**. Spices in picadillo include oregano, cumin, lemon juice, raisins, almonds and wine.

Rice and precooked beans are the daily bread and butter of some Brazilian homes. A delicious flavor is made from adding sauteed onion and peeled, chopped tomatoes.

### The Pacific Rim

Figure 5 shows the per capita consumption of rice in selected countries of the Pacific Rim.

In many countries of this part of the world, rice is the

staple food just as bread is in the West. It is mostly enjoyed steamed and served plain. However, many other methods exist for serving rice. The trophy for the highest per capita consumption goes to Vietnam at 169 kg (1993).

Brides in Japan are often judged by their ability to prepare and serve rice. In the Oriental culture, when rice is eaten with chopsticks, the bowl is always lifted to the lips. Good rice should be sticky enough to stay in a lump, but should not "clot," says K. Amano, vice president of Japan's Rice Millers' Association.

Special rice preparations are reserved for important holidays. The most important New Year food is **mochi**, a gelatinous rice cake made by pounding hot, steamed rice into sticky dough. The dough is formed into round cakes that are toasted over a fire before serving.

The harvest month, September, has the year's most beautiful moon, prompting moon viewing parties all over Japan. At these parties, known as "tsukimi," a favorite dish is rice flour dumplings or **tsukimi dango**. **Zoni**, served on New Year's Day, is a soup made with glutinous rice cakes in dashi stock (seaweed and dried bonito fish), containing cabbage, carrots, taro roots, mushrooms, prawns, soy sauce and lemon peel. At Japanese parties **ohagimochi** is served. This is a small, sweet round rice cake with a coating of red bean paste. **Sweet congee** is a hot snack made by cooking rice with lotus seeds, long ans (raisins) and jujube dates with sugar or honey added.

For the main meal, steamed, medium or short grain rice called **gohan** is the preferred Japanese style. It is cooked the pilaf way and produces moist, slightly adhering kernels. From this, sushi rice is concocted. It constitutes a basic element for fillings and toppings. Its flavor is derived from rice vinegar, sugar and sweet sake (mirin or dry sherry). **Maki sushi** is vinegared rice, vegetables and fish rolled in seaweed. Thinly sliced pickled red ginger is the main spice used in this preparation. **Nigiri-sushi** consists of oblong rice mounds topped with a variety of raw fish and cooked shrimp. The main flavoring is horseradish mixed in soy sauce used for dipping.

**Chirashi zushi** is vinegared sushi rice decoratively garnished with a variety of vegetables, seafood and egg, and seasoned with dashi stock. The flavorings are soy sauce, sake and pickled red ginger. Here the chef has the opportunity to show his or her artistic talent in decorating and garnishing.

**Sekihan** (red rice) is the tasty mixture of glutinous rice and azuki (red beans) garnished with toasted black sesame seeds.

Steamed rice is topped with **donburi sauce** that is essentially made from dashi stock, mirin (sweet sake) or dry sherry and soy sauce. **Yako donburi** is rice topped with chicken, mushroom and eggs.

Many rice meals are prepared by cooking meat or fish together with vegetables, raw rice and various condiments. In Japan such rice is called **takikomi gohan**, meaning "cooked together."

China is also extremely creative with rice. Their rice noodles and **guon fun** (rice formed into thin paper-like sheets), invented in ancient times, bring some proof to the belief that pasta was a Chinese creation. Their creativity is reflected in ingeniously shaping rice into new forms:

- **Hom goh**, often prepared during Chinese New Year for family and friends, is made from a glutinous rice flour dough filled with stir-fried vegetables and meat. The filled dough is shaped into a half-moon shape with edges pinched together and fried in hot oil.
- Oriental rice paper is a creative way of using rice. In this preparation rice is *not* the stuffing; it is the object to be stuffed. Rice papers, similar to flour paper strudel, are stuffed with either poultry, meat or seafood along with herbs and spices. Five-spice powder is preferred with chicken and the envelope-like stuffed rice paper is fried in oil. Otherwise the **bok fun**, which is white rice flour, is made into **home-made fun** (rice noodles). It can be made 1/2 inch wide or wider for **chow fun** (stir-fry) or for **guon fun** (filled rolled pancake).

**Guon fun** are rice sheets stuffed with bean sprouts, meat, eggs, onions, coriander sprigs, ginger, sesame oil, salt and pepper, which are rolled and steamed.

The Chinese visit the graves of ancestors and present offerings of food to the departed. Families of the deceased partake in sharing **gaw shung go** (nine-layered steamed pudding) on this occasion. This consists of a dough made from rice flour and brown sugar, which is then cooked in a pan or steamer in successive layers until the ninth layer is done.

For normal daily meals, rice is used in what are known as **one-pot** Chinese dishes. These dishes combine rice with meat, vegetables and other available ingredients. Additionally, rice is inventively used in salads, soups, hors d'oeuvres, dinners and desserts.

**Chinese chicken salad** is made by combining fried py mei fun (rice vermicelli) with a mixture of chicken and oil. The seasonings include soy sauce, hoisin sauce, peanuts, sesame seeds, five-spice powder, lemon juice, green onions and fresh coriander.

**Congee** or **jook** is a rice soup prepared with leftover meat or fish flavored with ginger, tangerine peel, preserved turnip, onions and coriander.

**Haw tip fun** is steamed lotus leaf and rice. The lotus leaves impart a richly fragrant aroma to the filling which contains pork, Chinese sausage, rice, bacon, scallops, water chestnuts, bamboo shoots, mushrooms, soy sauce, green onions and fresh coriander sprigs.

**Hom joong** (Chinese tamales) is traditionally eaten during the Chinese Dragon Boat Festival on the fifth day of May. This is a mixture of soaked rice, raw peanuts, mung beans or green peas, decorated with a topping of lop chiang (Chinese sausage), raw ham, salt pork, yolk of duck eggs, chestnuts, forest mushrooms and dried shrimp all cooked together. No spices or other flavorings are used or needed.

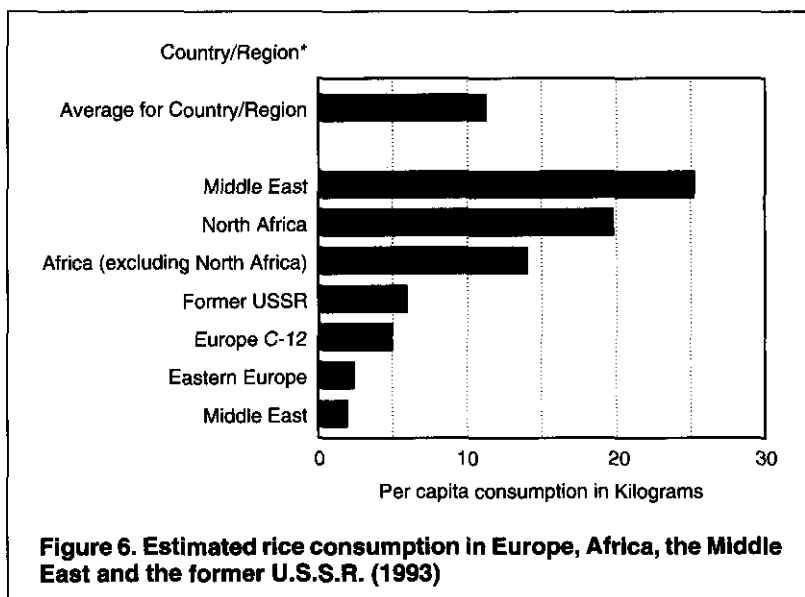
**Chinese rice stuffing** is cooked rice with lop chiang, ground pork, shrimp, forest mushrooms, tangerine peel, peanut oil, sesame oil, soy sauce, sherry, chicken stock, green onions and fresh coriander. **Shemshu**, rice wine, goes very well with such a wonderful dinner.

**Jien doy** are deep-fried rice balls with a sweet bean filling. Eaten as a pastry, they are a favorite treat and are also placed before an ancestral portrait during the Chinese New Year. They are made from a rice flour dough, sweetened with brown sugar and filled with sweet beans.

Other interesting rice dishes of the Far East region are the rice and lentil combinations of Sri Lanka and the rice and beans dish **pah joak** of Korea.

**Khao phat** from Thailand is a colorful fried rice served in banana leaves.

Indonesian formed rice, **lontong**, is an example of a unique art of preparing rice. Medium grain rice is wrapped tightly in banana leaves while cooking. This process produces a solid mass of cooked rice that can be formed and sliced artistically. This, along with the flavors of coconut milk and lime juice, make it a very special side dish.



**Rempejek**, the Indonesian rice/peanut-cracker, is eaten as a snack or served as a side dish. It is a delicious oil-fried batter made of rice flour mixed with onion, almonds, garlic, coriander, peanuts and coconut milk.

The Indonesian dish called **nasi goreng** is prepared in a wok or skillet with cooked rice, meat and vegetables. The main flavoring ingredients are green onion and soy sauce.

In the Philippines a national favorite is **pork adobo**. This pork stew is spiced with garlic, lemon, cloves, nutmeg, ginger, cinnamon, vinegar, paprika and peppercorns, with rice served on the side.

India is well-known for basmati rice, which means the "queen of fragrance." The popular **mulligatawny**, meaning "pepper and water," that was once a humble person's rice soup is today's rich meal of lamb stew and vegetables. Its characterizing flavor is a light, curry taste with a background of mace, cloves and coconut milk.

An attestation to rice's magnificent flavor adaptability is the colorful Indian **masala dar pilau**. In its elaborate official form, it has meat, poultry, vegetables, eggs, dried beans or lentils, and is flavored with onions, garlic, yogurt, cardamom, turmeric, ginger, cayenne pepper, green pepper, tomato and coriander sprigs. It is rice and only rice that can harmoniously mellow such a concoction. Let's not forget the crown of rice dishes, **biryani**, that can be made with either vegetables or meat. It is served with a relish of freshly chopped tomato, onion, cucumber, cilantro, cumin and cayenne pepper. This one is a jewel of a dish.

**Kheer** is a fragrant pudding where rice is cooked in milk, flavored with cardamom and rose water, and sprinkled with pistachios.

The potent Indian rice beer is known as **bakar**.

#### Europe, Middle East, Africa and former U.S.S.R.

Figure 6 shows the per capita consumption of rice in

Europe, the Middle East, Africa and the former Soviet Union.

The Spanish culinary flag **paella** is a representation of the nation's artistic and festive mood. In my opinion this is the king of rice dishes both in taste and nutritive value. This famous Spanish rice dish is named after the pan, called a "paella," in which the rice is usually prepared. A good Spanish chef will tell you the three essential components are the rice, olive oil and saffron—not the meat.

The elegance of French food presentation shows in rice dishes. Their **rice salad** is well decorated with celery, cucumber, radishes, olives, anchovies, tomato, eggs and watercress. The preferred dressing is a mixture of mayonnaise, horseradish, paprika and mustard.

The French demonstrate their love for cheese in their **trois fromages—riz**, which uses a mixture of Emmenthal, Roquefort and Parmesan cheeses; their love for wine is demonstrated in cooked rice with white wine, Parmesan or Gruyere cheese.

Typically, if you can drill a hole in it, the French will stuff it with rice. So, all vegetables that fit the bill become **farci**, which is stuffed vegetables.

For desserts, they have great rice pudding, where the Madagascar bourbon vanilla is in the limelight.

The Italians' love for complex carbohydrates is not exclusive to pasta. It is also well manifested in rice.

The Italian **risotto** is non pareil. A good chef will cook the rice in mushrooms, onions and wine. No spices are allowed to interfere with this creamy (chicken stock and Parmesan cheese) dish. It seems that Italy has put its seal on this famous recipe where the cooked rice is creamy on the outside and al dente on the inside and, of course, they use nothing but their best Arborio rice (medium grain).

**Risotto Milanese**, which is similar to Italian risotto but with saffron added, is usually served with osso buco.

**Risi e bisi** is another delicious Italian dish combining rice with fresh green peas, flavored with onion, chicken stock, white wine, prosciutto ham and Parmesan cheese.

**Risotto and cheese balls** are made by combining rice, raw eggs and bread crumbs to make balls which are then stuffed with mozzarella cheese. Frying them in oil makes them a conversation piece as hors d'oeuvres.

The Lombardy region is famous for its **minestrone ala Milanese** using rice as an ingredient in this well-known vegetable soup.

From Sicily come **Arancini**, a popular menu item in taverns. Arancini are large fried rice balls filled with meat and cheese, usually Parmesan and provolone (or mozzarella). The flavor is a combination of onion, tomato, oregano and rosemary leaves.

An interesting preparation is cooked rice prepared by alternating layers of rice with thin layers of mozzarella cheese which is then oven-baked. Naturally, if Italian sausage is added, it becomes the gourmet **risotto al prosciutto**, better than any pizza I have ever had!

Portuguese **Friday soup** is fish soup with rice and vegetables flavored with basil, oregano, coriander and cayenne pepper.

The meatless Turkish **pilaf** derives its unique taste from notes of onion, cinnamon, allspice, mace, cloves, pine nuts, pistachio nuts or almonds and currants. Usually nuts are sauteed and used as a garnish. What a symphony of flavors!

A typical Danish dish is baked rice with chopped beef liver, eggs and raisins, flavored with onion, molasses, allspice and cloves.

The Greek soup **avgolemono** is a tangy, creamy soup. The trick here is to combine acid lemon juice with the creamy texture of eggs, without curdling the eggs. This is achieved by adding the lemon juice slowly to a well-beaten egg. Rice is cooked in the broth.

What is believed to be a Middle Eastern regional dish, **kitcherie**, is in reality an Indian breakfast dish that became popular in Egypt and some Middle Eastern countries. It is prepared with lentil beans and rice cooked together and garnished with fried onions. It is also known as **mujadarra**.

Vegetable delicacies stuffed with rice are artfully executed in the Middle East. The stuffing can be totally vegetarian style, where raw rice is mixed with olive oil, onions and garlic, flavored with allspice and mint. Tomatoes, zucchini, eggplant, lettuce and artichokes are just a

few examples of vegetables which can be stuffed.

The most exquisite Middle Eastern rice dish, without question, is **stuffed grape leaves**. Not just any leaves are appropriate for use in this preparation. A special vine that produces tender, tasty leaves is used. This is a typical, successful dish that claims many parents. The Greek call it **dolmas**, and filed for its adoption, while the Lebanese and Syrians dispute this claim relentlessly.

Stuffed grape leaves can have the simple flavor of the green, tangy grape leaves, meat, rice, lime juice and garlic when served hot. Dolmas served cold has a more complex flavor, where the meat is replaced with the flavor of tomatoes, onion, parsley, mint, cinnamon, allspice, pepper and olive oil.

### Future Outlook

We believe that rice will continue to be rediscovered and its use will increase in several areas of the world. Brown rice, naturally containing the bran layer, might become more popular, especially with health-conscious consumers. Formed rice (such as rice noodles, rice spaghetti, rice sheets for filling or making special dishes such as lasagna) might increase in popularity in the Western Hemisphere.

Consumer packages of spice/vegetable/herb preparations to add to precooked rice for cooking together will be of more interest in some areas in the Pacific Rim and Europe. Japan's decision to end its prohibition on the import of foreign rice will stir up more ideas for the promotion and marketing of rice. Rice desserts and rice beverages might gain consumer interest in the future.

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