

Staple foods: What do people eat?

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The world has over 50 000 edible plants. Just three of them, rice, maize and wheat, provide 60 percent of the world's food energy intake.



The main staple foods in the average African diet are (in terms of energy) cereals (46 percent), roots and tubers (20 percent) and animal products (7 percent).



In Western Europe the main staple foods in the average diet are (in terms of energy) animal products (33 percent), cereals (26 percent)

and roots and tubers (4 percent).

The sources of food



[Click here to see the map](#)

Selected food crops:

- | | | | |
|--|---|--|--|
| <p>1. Chinese-Japanese region
bamboo, millet, mustard, orange, peach, rice, soybean, tea</p> | <p>4. Hindustani region
banana, bean, chick-pea, citrus, cucumber, eggplant, mango, mustard, rice, sugar cane</p> | <p>7. Mediterranean region
beetroot, cabbage, celery, fava bean, grape, lettuce, oats, olive, radish, wheat</p> | <p>10. South American region
cacao, cassava, groundnut, lima bean, papaya, pineapple, potato, squash, sweet potato, tomato</p> |
| <p>2. Indochinese-Indonesian region
bamboo, banana, coconut, grapefruit, mango, rice, sugar cane, yam</p> | <p>5. Central Asian region
apple, apricot, bean, carrot, grape, melon, onion, pea, pear, plum, rye, spinach, walnut, wheat</p> | <p>8. African region
coffee, millet, oil palm, okra, sorghum, teff, wheat, yam</p> | <p>11. Central American and Mexican region
french bean, maize, pepper/chill), potato, squash</p> |
| <p>3. Australian region
macadamia nut</p> | <p>6. Near Eastern region
almond, barley, fig, grape, lentil, melon, pea, pistachio, rye, wheat</p> | <p>9. European-Siberian region
apple, cherry, chicory, hops, lettuce, pear</p> | <p>12. North American region
blueberry, sunflower</p> |

Staple crops are shown in bold type

A staple food is one that is eaten regularly and in such quantities as to constitute the dominant part of the diet and supply a major proportion of energy and nutrient needs.

A staple food does not meet a population's total nutritional needs: a variety of foods is required. This is particularly the case for children and other nutritionally vulnerable groups.

Typically, staple foods are well adapted to the growth conditions in their source areas. For example, they may be tolerant of drought, pests or soils low in nutrients. Farmers often rely on staple crops to reduce risk and increase the resilience of their agricultural systems.

Most people live on a diet based on one or more of the following staples: rice, wheat, maize (corn), millet, sorghum, roots and tubers (potatoes, cassava, yams and taro), and animal products such as meat, milk, eggs, cheese and fish.

Of more than 50 000 edible plant species in the world, only a few hundred contribute significantly to food supplies. Just 15 crop plants provide 90 percent of the world's food energy intake, with three rice, maize and wheat - making up two-thirds of this. These three are the staples of over 4 000 million people.

Although there are over 10 000 species in the Gramineae (cereal) family, few have been widely introduced into cultivation over the past 2 000 years. Rice feeds almost half of humanity. Per caput rice consumption has generally remained stable, or risen slightly since the 1960s. It has declined in recent years in many of the wealthier rice-consuming countries, such as Japan, the Republic of Korea and Thailand, because rising incomes have enabled people to eat a more varied diet.

Roots and tubers are important staples for over 1 000 million people in the developing world. They account for roughly 40 percent of the food eaten by half the

population of sub-Saharan Africa. They are high in carbohydrates, calcium and vitamin C, but low in protein.

Per caput consumption of roots and tubers has been falling in many countries since the beginning of the 1970s, mainly because urban populations have found it cheaper and easier to buy imported cereals. Since 1970, consumption of roots and tubers in the Pacific Islands has fallen by 8 percent, while cereal consumption jumped by 40 percent, from 61 to 85 kilograms per person.

Many countries are experiencing a similar shift away from traditional foods, but there is growing recognition of the importance of traditional food crops in nutrition. After years of being considered "poor people's foods" some of these crops are now enjoying a comeback. Cassava, considered a minor crop at the turn of the century, has now become one of the developing world's most important staples providing a basic diet for around 500 million people. Plantings are increasing faster than for any other crop. Quinoa, a grain grown in the high Andes, is also gaining wider acceptance even outside of Latin America with the introduction of new varieties and improved processing.

Proportions of food in average diets

World diets



[Click here to see the map](#)

(289 KB) - Be careful!

Each coloured segment indicates a contribution of 10 percent or more to the average dietary energy supply (DES). Other foods and any food group providing less than 10 percent to the DES is coloured grey. Because the figures are shown as ranges and not precise numbers, segments showing similar percentages do not always appear the same size. Boundaries of newly formed nations (in former USSR, in former Yugoslavia in former Czechoslovakia, Eritrea) are shown in grey. Data for these countries not available.

Statistics for next zones (these are connected to the previous map):

[North America, Central America and Caribbean \(48 KB\)](#)

[Europe and area of the former USSR \(69 KB\)](#)

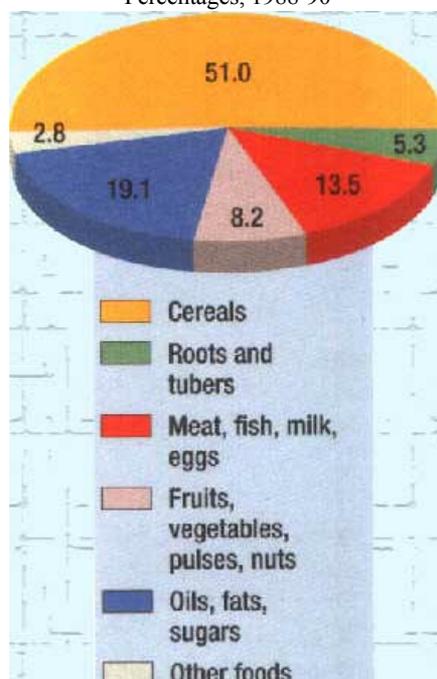
[Asia \(90 KB\)](#)

[South America \(37 KB\)](#)

[Africa \(139 KB\)](#)

[Southwest Pacific \(20 KB\)](#)

World average diet
Percentages, 1988-90



Other important nutritional sources - complementary foods

Throughout the world, complementary foods play an essential role in meeting nutrient requirements. They include protein sources - meat, poultry, fish, legumes and milk products; energy sources - fats, oils and sugars; and vitamin and mineral sources - fruits, vegetables and animal products.

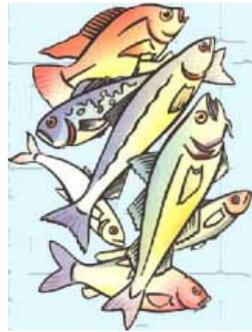
In addition to conventional crops and agricultural products, the following are valuable sources of nutrition. Their importance is particularly obvious during seasonal and emergency shortages.



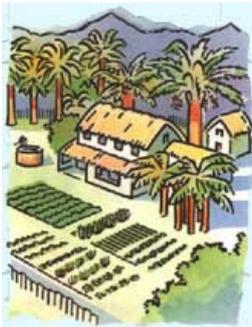
Wild plants are essential for many rural subsistence households; at least 1 000 million people are thought to use them. In Ghana, for instance, the leaves of over 100 species of wild plants and the fruits of another 200 - are consumed. In rural Swaziland, more than 220 species of wild plants provide a greater share of the diet than domesticated cultivars. In India, Malaysia and Thailand, about 150 wild plant species have been identified as sources of emergency food.



Wild animals including insects, birds, fish, rodents and larger mammals are often the only source of animal protein for rural people. In parts of the Peruvian Amazon, for example, over 85 percent of dietary animal protein is from the wild. Some 62 developing countries rely on wildlife for at least one-fifth of their animal protein.



Fish supplements the rice diet of many north-eastern Thai and Lao farming families. Both fish and frogs are caught in streams, irrigation canals, ditches, water reservoirs and flooded paddy fields.



Tree foods and home gardens contribute significantly to rural diets. In West Java, Indonesia, coconut trees and home gardens produce 32 percent of total dietary protein and 44 percent of total calorie needs. In Puerto Rico, the produce from home gardens has increased vitamin A and C intake, especially in children.



Forest foods can provide varied food year round, supplying essential minerals and vitamins. They include: wild leaves, seeds and nuts, fruits, roots and tubers, mushrooms, honey and animal products.

THE WORLD'S FORGOTTEN FOODS

Some traditional food plants could become foods of the future - a convenient source of income, improved nutrition and increased food supply.

Amaranth and quinoa -grains that originally came from the Andes and were holy to the Incas of Peru and the Aztecs of Mexico - are being reevaluated. Both are versatile and nutritious. They are also hardy: amaranth thrives in hot climates; quinoa is frost resistant and can be grown as high as 4 000 metres.

Many more traditional foods await development and wider use.

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