Saudi Aramco

World

Flavors 2005

Partake of the good things which We have provided for you as sustenance, and render thanks unto God....
—The Qur'an, Chapter 2 ("The Cow") Verse 172

Gregorian and Hijri *Calendars*

Worlds of Flavor

Cover: **Even in the Arab Middle East, where sweet pastries are beloved, fresh fruit is often a preferred dessert, and a rich variety of fruits grows in every country of the Arab world. Of the lush selection on this Moroccan platter, only the pineapple originated outside the region, and it is now grown extensively in India and Indonesia. Photo by Brynn Bruijn.**

Arab cooking is as various as the Arabs themselves. What else would you expect from a people who fish in the Atlantic, the Mediterranean, the Red Sea, the Arabian Gulf and the Indian Ocean? Who farm the slopes of the Atlas, the banks of the Nile, the terraces of Mount Lebanon, below sea level at Jericho, on the wide plains of Syria and Iraq and in the hothouse oases of Arabia? Who have traded since time immemorial with China, India, the Spice Islands, Zanzibar, Samarkand and the West? Who once ruled Persia, parts of the Byzantine Empire, Sicily, Spain, Berbers, Nubians and Kurds, and who were themselves partially conquered by Mongols, Normans, Seljuk and Ottoman Turks, Portuguese, Italians, French and English?

Of course there is a certain unity in the diversity. The ubiquity of rice is one of the ties that bind. Another is the tomato–onion–garlic–olive-oil culture of the Mediterranean. The kindness of the climate produces the same fruits—oranges, lemons, grapes, apricots, dates, figs—almost everywhere, or at least close by, while the harshness of the terrain forces a reliance on the hardy sheep and goat for meat and milk. A surprising unity in the arts of good living, including cooking, was bequeathed by 500 years of Ottoman rule. And even a negative unity is imposed by religion, which removes pork from the menu and wine from the cooking pot.

But in food, diversity is the spice of life. Changing one ingredient—substituting olive oil for butter, cracked wheat for rice, coriander for parsley—can transform a dish. The many ways of treating chicken—with pickled lemons in Morocco, with onions and sumac in Jordan, with walnuts in the dish known as Circassian chicken or, most surprisingly, turned into a sweet dessert in Istanbul—show what variations can be played on a single theme.

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In most of North Africa, the culinary tradition is Arabo-Berber with a Turkish overlay. The distinctive dish is couscous—steamed grains of semolina—used as a base for a wide range of dishes, from fish and meat stews to spicy fruit-and-nut desserts. Further east, the Egyptians still enjoy the beans, onions, garlic and cabbage that appear on wall paintings in pharaonic tombs 4000 years old, and make a national dish of *mulukhiyah*—a thick, dark-green sauce flavoring chicken, lamb or rabbit.

Moving northward up the Mediterranean shore, we come to that great network of rivers—the Euphrates, Tigris, Orontes and Jordan—that water the valleys and plains of Syria, Lebanon, Palestine, Jordan and Iraq. This region is a vegetarian's paradise, with a seasonal procession of fruits and vegetables, cereals and fragrant herbs.

Complementary to the fertile river valleys, the neighboring deserts have produced a tasty cuisine of necessity: chunks of meat skewered and roasted over hot coals, a bird sheathed in clay and left among the ashes, lamb boiled in ewe's milk, succulent desert truffles, dates and coffee—the last short, sharp and astringent with the flavor of cardamom. And especially on the eastern fringes of the Arabian Peninsula, the spices of India seduce the tongue, brought by the monsoon winds aboard trading dhows.

Persian cuisine, with its luxury and elaboration, has been famous since antiquity, and its influence has been felt throughout the region. Turkey has injected its textures, colors and harmonies of taste wherever the Osmanlıs penetrated, leaving a legacy of dishes, some of a Byzantine subtlety, in Arab cities as far apart as Tunis and Jiddah. Yet they also brought the cleanest taste of all—yogurt, or *laban* in Arabic—from their Mongol past.

Most important, the Arabs, Turks and Persians still show an old-world respect for food—for the ingredients, the preparation and the act of eating, as well as for the eater. They search out the best raw materials, each cook having his or her favorite and often secret source of olive oil, goat cheese, apples or *kanafi*. The menu is seasonal, the strawberries or zucchini tasting all the sweeter for the short time there is to enjoy them. The cook is still willing to take infinite pains and usually follows her or his mother's or grandmother's recipe.

With such a cornucopia of delights to choose from, it has been difficult to select only seven images—not even enough for appetizers!—to represent the flavors of the Arab and Muslim worlds. Yet we hope that they will indeed serve as appetizers, encouraging our readers in their own culinary explorations. —THE EDITORS

Converting Dates

The following equations convert roughly from Gregorian to *hijri* and vice versa. However, the results can be slightly misleading: They tell you only the year in which the other calendar's year *began*. For example, 2005 Gregorian spans both 1425 and 1426 *hijri*, but the equation tells you that 2005 "equals" 1426, when in fact 1426 merely began during 2005.

Gregorian year = [(32 x *hijri* year) ÷ 33] + 622

***hijri* year** = [(Gregorian Year – 622) x 33] ÷ 32

Alternatively, there are more precise calculators available on the Internet: Try **www.rabiah.com/convert/** and **www.ori.unizh.ch/hegira.html**.

Patterns of Moon, Patterns of Sun

It is he who made the sun to be a shining glory, and the moon to be a light (of beauty), and measured out stages for her, that ye might know the number of years and the count (of time).
—The Qur'an, Chapter 10 ("Yunus") Verse 5

BY PAUL LUNDE

The *hijri* calendar

In AD 638, six years after the death of the Prophet Muhammad, Islam's second caliph 'Umar recognized the necessity of a calendar to govern the affairs of the Muslims. This was first of all a practical matter. Correspondence with military and civilian officials in the newly conquered lands had to be dated. But Persia used a different calendar from Syria, where the caliphate was based; Egypt used yet another. Each of these calendars had a different starting point, or epoch. The Sasanids, the ruling dynasty of Persia, used June 16, AD 632, the date of the accession of the last Sasanid monarch, Yazdagird III. Syria, which until the Muslim conquest was part of the Byzantine Empire, used a form of the Roman "Julian" calendar, with an epoch of October 1, 312 BC. Egypt used the Coptic calendar, with an epoch of August 29, AD 284. Although all were solar, and hence geared to the seasons and containing 365 days, each also had a different system for periodically adding days to compensate for the fact that the true length of the solar year is not 365 but 365.2422 days.

In pre-Islamic Arabia, various other systems of measuring time had been used. In South Arabia, some calendars apparently were lunar, while others were lunisolar, using months based on the phases of the moon but intercalating days outside the lunar cycle to synchronize the calendar with the seasons. On the eve of Islam, the Himyarites appear to have used a calendar based on the Julian form, but with an epoch of 110 BC. In central Arabia, the course of the year was charted by the position of the stars relative to the horizon at sunset or sunrise, dividing the ecliptic into 28 equal parts corresponding to the location of the moon on each successive night of the month. The names of the months in that calendar have continued in the Islamic calendar to this day and would seem to indicate that, before Islam, some sort of lunisolar calendar was in use, though it is not known to have had an epoch other than memorable local events.

There were two other reasons 'Umar rejected existing solar calendars. The Qur'an, in Chapter 10 Verse 5, states that time should be reckoned by the moon. Not only that, calendars used by the Persians, Syrians and Egyptians were identified with other religions and cultures. He therefore decided to create a calendar specifically for the Muslim community. It would be lunar, and it would have 12 months, each with 29 or 30 days.

This gives the lunar year 354 days, 11 days fewer than the solar year. 'Umar chose as the epoch for the new Muslim calendar the *hijrah*, the emigration of the Prophet Muhammad and 70 Muslims from Makkah to Madinah, where Muslims first attained religious and political autonomy. The *hijrah* thus occurred on 1 Muharram 1 according to the Islamic calendar, which was named "*hijri*" after its epoch. (This date corresponds to July 16, AD 622 on the Gregorian calendar.) Today in the West, it is customary, when writing *hijri* dates, to use the abbreviation AH, which stands for the Latin *anno hegirae*, "year of the *hijrah*."

Because the Islamic lunar calendar is 11 days shorter than the solar, it is therefore not synchronized to the seasons. Its festivals, which fall on the same days of the same lunar months each year, make the round of the seasons every 33 solar years. This 11-day difference between the lunar and the solar year accounts for the difficulty of converting dates from one system to the other.

Though they share 12 lunar cycles—months—per solar year, the *hijri* calendar uses actual moon phases to mark them, whereas the Gregorian calendar adjusts its nearly lunar months to synchronize with the sun.

The Gregorian calendar

The early calendar of the Roman Empire was lunisolar, containing 355 days divided into 12 months beginning on January 1. To keep it more or less in accord with the actual solar year, a month was added every two years. The system for doing so was complex, and cumulative errors gradually misaligned it with the seasons. By 46 BC, it was some three months out of alignment, and Julius Caesar oversaw its reform. Consulting Greek astronomers in Alexandria, he created a solar calendar in which one day was added to February every fourth year, effectively compensating for the solar year's length of 365.2422 days. This Julian calendar was used throughout Europe until AD 1582.

In the Middle Ages, the Christian liturgical calendar was grafted onto the Julian one, and the computation of lunar festivals like Easter, which falls on the first Sunday after the first full moon after the spring equinox, exercised some of the best minds in Christendom. The use of the epoch AD 1 dates from the sixth century, but did not become common until the 10th. Because the zero had not yet reached the West from Islamic lands, a year was lost between 1 BC and AD 1.

The Julian year was nonetheless 11 minutes and 14 seconds too long. By the early 16th century, due to the accumulated error, the spring equinox was falling on March 11 rather than where it should, on March 21. Copernicus, Christophorus Clavius and the physician Aloysius Lilius provided the calculations, and in 1582 Pope Gregory XIII ordered that Thursday, October 4, 1582 would be followed by Friday, October 15, 1582. Most Catholic countries accepted the new "Gregorian" calendar, but it was not adopted in England and the Americas until the 18th century. Its use is now almost universal worldwide. The Gregorian year is nonetheless 25.96 seconds ahead of the solar year, which by the year 4909 will add up to an extra day.

Historian **Paul Lunde** (paullunde@hotmail.com) specializes in Islamic history and literature. His most recent book is *Islam: Culture, Faith and History* (2001, Dorling Kindersley).

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Spices and spice blends create rich harmonies in Middle Eastern cooking. Each thread of saffron (center) **is plucked separately from a pale-purple crocus blossom in Spain, Kashmir or Iran. The surrounding bowls** (clockwise from right) **hold red pepper, ground dried ginger, black peppercorns, cinnamon, cumin and turmeric. Cinnamon bark and whole dried ginger fill out the tray—though the skilled cook' s repertoire is more extensive still. Photo by Brynn Bruijn.**

JANUARY

DHU AL-QA'DAH — DHU AL-HIJJAH 1425

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1 20	**2** 21	**3** 22	**4** 23	**5** 24	**6** 25	**7** 26
8 27	**9** 28	**10** 29	**11** 30	**12** 1	**13** 2	**14** 3
15 4	**16** 5	**17** 6	**18** 7	**19** 8	**20** 9	**21** 10 'Id al-Adha
22 11	**23** 12	**24** 13	**25** 14	**26** 15	**27** 16	**28** 17
29 18	**30** 19	**31** 20				

FEBRUARY

DHU AL-HIJJAH 1425 — MUHARRAM 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
			1 21	**2** 22	**3** 23	**4** 24
5 25	**6** 26	**7** 27	**8** 28	**9** 29	**10** 1	**11** 2
12 3	**13** 4	**14** 5	**15** 6	**16** 7	**17** 8	**18** 9
19 10	**20** 11	**21** 12	**22** 13	**23** 14	**24** 15	**25** 16
26 17	**27** 18	**28** 19				

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A campfire among al-Hajri herders in eastern Saudi Arabia warms a curve-spouted *dallah*, the traditional coffee pot of the central Arabian Peninsula, and an assortment of kettles. The dallah's long spout, with a palm-fiber filter plug inserted at its base, helps the host pour the traditional three tiny cupfuls for each guest. The lightly roasted coffee beans, together with cardamom or, on occasion, cloves, are ground fresh for each pot with the mortar and pestle. Photo by Abdullah Y. Al-Dobais.

MARCH

MUHARRAM — SAFAR 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
			1 20	**2** 21	**3** 22	**4** 23
5 24	**6** 25	**7** 26	**8** 27	**9** 28	**10** 29	**11** 1
12 2	**13** 3	**14** 4	**15** 5	**16** 6	**17** 7	**18** 8
19 9	**20** 10	**21** 11	**22** 12	**23** 13	**24** 14	**25** 15
26 16	**27** 17 Easter	**28** 18	**29** 19	**30** 20	**31** 21	

APRIL

SAFAR — RABI' AL-AWWAL 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
						1 22
2 23	**3** 24	**4** 25	**5** 26	**6** 27	**7** 28	**8** 29
9 30	**10** 1	**11** 2	**12** 3	**13** 4	**14** 5	**15** 6
16 7	**17** 8	**18** 9	**19** 10	**20** 11	**21** 12	**22** 13
23 14	**24** 15	**25** 16	**26** 17	**27** 18	**28** 19	**29** 20
30 21						

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A selection of the finest date varieties of Saudi Arabia represents the roughly 300 varieties grown in the country. Of the world's 64 million date palms, about three million grow in the Al-Hasa Oasis, in the Eastern Province of Saudi Arabia; another quarter-million trees in the Coachella Valley of southern California produce the majority of the United States' date crop. Photo by Eric Hansen.

MAY

RABIʿ AL-AWWAL — RABIʿ AL-THANI 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	1 22	**2** 23	**3** 24	**4** 25	**5** 26	**6** 27
7 28	**8** 29	**9** 1	**10** 2	**11** 3	**12** 4	**13** 5
14 6	**15** 7	**16** 8	**17** 9	**18** 10	**19** 11	**20** 12
21 13	**22** 14	**23** 15	**24** 16	**25** 17	**26** 18	**27** 19
28 20	**29** 21	**30** 22	**31** 23			

JUNE

RABIʿ AL-THANI — JUMADA AL-ULA 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
				1 24	**2** 25	**3** 26
4 27	**5** 28	**6** 29	**7** 30	**8** 1	**9** 2	**10** 3
11 4	**12** 5	**13** 6	**14** 7	**15** 8	**16** 9	**17** 10
18 11	**19** 12	**20** 13	**21** 14	**22** 15	**23** 16	**24** 17
25 18	**26** 19	**27** 20	**28** 21	**29** 22	**30** 23	

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"Quality in simplicity" is the watchword of Turkish cuisine, and even though an array of Turkish *meze* (appetizers) can number 50 different hot and cold delights, simple melon or white cheese or olives can be the best. Salty or briny, black or green, the olives complement every dish and appear at every meal. At almost a million metric tons a year, Turkey's olive production leads the Muslim world's. Photo by Robert Arndt.

JULY

JUMADA AL-ULA – JUMADA AL-AKHIRA 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
						1 24
2 25	**3** 26	**4** 27	**5** 28	**6** 29	**7** 1	**8** 2
9 3	**10** 4	**11** 5	**12** 6	**13** 7	**14** 8	**15** 9
16 10	**17** 11	**18** 12	**19** 13	**20** 14	**21** 15	**22** 16
23 17	**24** 18	**25** 19	**26** 20	**27** 21	**28** 22	**29** 23
30 24	**31** 25					

AUGUST

JUMADA AL-AKHIRA — RAJAB 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
		1 26	**2** 27	**3** 28	**4** 29	**5** 30
6 1	**7** 2	**8** 3	**9** 4	**10** 5	**11** 6	**12** 7
13 8	**14** 9	**15** 10	**16** 11	**17** 12	**18** 13	**19** 14
20 15	**21** 16	**22** 17	**23** 18	**24** 19	**25** 20	**26** 21
27 22	**28** 23	**29** 24	**30** 25	**31** 26		

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Rice, cultivated for at least 6000 years, is the primary food of half the world's population. In its many varieties, it provides 55 percent of the calories of the average Indonesian's diet, 12 percent of the Egyptian's and five percent of the Pakistani's, and—though imported—it is one of the unifying staples of the cuisines of the Arab world. Photo by Brynn Bruijn.

SEPTEMBER

RAJAB — SHA'BAN 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
					1 27	**2** 28
3 29	**4** 30	**5** 1	**6** 2	**7** 3	**8** 4	**9** 5
10 6	**11** 7	**12** 8	**13** 9	**14** 10	**15** 11	**16** 12
17 13	**18** 14	**19** 15	**20** 16	**21** 17	**22** 18	**23** 19
24 20	**25** 21	**26** 22	**27** 23	**28** 24	**29** 25	**30** 26

OCTOBER

SHA'BAN — RAMADAN 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1 27	**2** 28	**3** 29	**4** 1	**5** 2	**6** 3	**7** 4
8 5	**9** 6	**10** 7	**11** 8	**12** 9	**13** 10	**14** 11
15 12	**16** 13	**17** 14	**18** 15	**19** 16	**20** 17	**21** 18
22 19	**23** 20	**24** 21	**25** 22	**26** 23	**27** 24	**28** 25
29 26	**30** 27	**31** 28				

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Tart, bright-red *karkady*, hibiscus tea, is especially popular in Egypt and the Sudan, where it is drunk hot or cold, depending on the season. People gather and dry the flower calyces of *Hibiscus sabdariffa*, a tall, reedy plant, and infuse them in boiling water to make the drink. For a brief period before World War II, karkady was also grown in the United States, where it was known as "Florida cranberry." Photo by John Feeney.

NOVEMBER

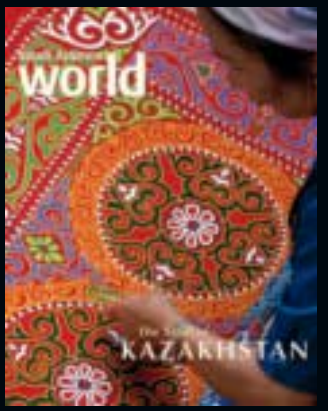
RAMADAN — SHAWWAL 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
			1 29	**2** 30	**3** 1 'Id al-Fitr	**4** 2
5 3	**6** 4	**7** 5	**8** 6	**9** 7	**10** 8	**11** 9
12 10	**13** 11	**14** 12	**15** 13	**16** 14	**17** 15	**18** 16
19 17	**20** 18	**21** 19	**22** 20	**23** 21	**24** 22	**25** 23
26 24	**27** 25	**28** 26	**29** 27	**30** 28		

DECEMBER

SHAWWAL — DHU AL-QA'DAH 1426

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
					1 29	**2** 30
3 1	**4** 2	**5** 3	**6** 4	**7** 5	**8** 6	**9** 7
10 8	**11** 9	**12** 10	**13** 11	**14** 12	**15** 13	**16** 14
17 15	**18** 16	**19** 17	**20** 18	**21** 19	**22** 20	**23** 21
24 22	**25** 23 Christmas	**26** 24	**27** 25	**28** 26	**29** 27	**30** 28
31 29						



In November 1949, the Arabian American Oil Company (Aramco) launched an interoffice newsletter named *Aramco World*. Over the next two decades, as the number of Americans working with Saudi colleagues in Dhahran grew into the tens of thousands, *Aramco World* grew into a bimonthly educational magazine whose historical, geographical and cultural articles helped the American employees and their families appreciate an unfamiliar land.

The magazine is now published by Aramco Services Company in Houston, Texas on behalf of Saudi Aramco, which succeeded Aramco in 1988 as the national oil company of Saudi Arabia. In 2000, *Aramco World* changed its name to *Saudi Aramco World* to reflect this relationship.

Today, *Saudi Aramco World*'s orientation is still toward education, the fostering of cooperation and the building of mutual appreciation between East and West, but for the last four decades the magazine has been aimed primarily at readers outside the company, worldwide, as well as at internal readers. Its articles have spanned the Arab and Muslim worlds, past and present, with special attention to their connections with the cultures of the West.

Subscriptions to *Saudi Aramco World* are available without charge to a limited number of readers interested in the cultures of the Arab and Muslim worlds and their connections with the West. Multiple-copy subscriptions for seminars or classrooms are also available. From Saudi Arabia, please send subscription requests to Public Relations, Saudi Aramco, Box 5000, Dhahran 31311. From all other countries, send subscription requests—signed and dated, please—by postal mail to *Saudi Aramco World*, Box 2106, Houston, Texas 77252, USA; or by fax to +1-713-432-5536.

The texts of all back issues of *Aramco World* and *Saudi Aramco World* can be found on our website, www.saudiaramcoworld.com; articles from issues since the end of 2003 include photographs. The website is fully searchable, and texts can be downloaded. In addition, many of the photographs from past issues are available at photoarchive.saudiaramcoworld.com and may be used once permission has been obtained online.

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