

Food, Cuisine, and Cultural Competency for Culinary, Hospitality, and Nutrition Professionals

Edited by:

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DEDICATION

To my brother, Larry Weinstein. Thanks for letting me tag along when we were kids.

Thanks to all the food professionals who graciously gave their time to create a book that represents the diversity and celebration of culture and cuisine.



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Preface

Sari Edelstein, PhD, RD

Food, Cuisine, and Cultural Competency for Culinary, Hospitality, and Nutrition Professionals provides the food and nutrition expert with insights into many cultures of the world through the history and traditions of the people themselves as well as the foods they grow, gather, and prepare. From these insights, readers will become more culturally aware about the diverse world in which we live today. To become culturally competent in the face of this diversity, one must understand the food traditions that unite people and the significance that food plays as an integral part of culture. Each chapter thus provides a description of the culture's history and explains how food is utilized for religious customs, nutritional health, traditional celebrations, medicinal treatments, and international commerce. To provide this level of detail, each culture is analyzed in terms of its protein, starch, fat, vegetable, fruit, spice, and beverage choices. In addition, typical and holiday meals, with recipes, are provided, as well as food-name translations.

FOODS IN EACH CULTURE

Particular foods often exist in a culture because of the climate, terrain, and robustness of the crop. Cultures

have flourished or floundered based on the availability of crops and livestock, which provide vital proteins and nutrients for sustainability. The following chapter excerpts characterize the cultures to which they relate:

“Traditional African cooking methods include steaming food in banana or corn-husk leaves, boiling, frying in oil, or grilling over an open fire.”
—Ethiopia (Chapter 31)

“The cattle and horses left behind from the first failed Spanish settlement began multiplying and formed the basis for the cattle and horse industry of today.” —Argentina (Chapter 42)

“Dates (*tamar*) are a delicacy cherished and demanded all year long. In fact, the palm tree is also highly prized and considered *barakah* (a blessing) in any proximity. It is the only tree indigenous to the region, the one that survived the desert heat.”
—Arabian Peninsula (Chapter 47)

“‘Bush foods,’ such as berries, roots, and nectars, were a vital part of the aboriginal diet in many areas.” —Australia (Chapter 44)

“It is a common misconception that all Chinese people eat rice as a staple food.” —Far East (Chapter 22)

“The perfect meal follows the ancient Chinese model containing five colors (purple, white, red, yellow, and green) using a variety of preparation methods (raw, grilling, steaming, boiling, braising, and deep-fat frying) and is composed of six tastes (sweet, bitter, salty, sour, peppery, and umami).” —Japan (Chapter 25)

“Another significant vegetable is the sweet potato, which is increasing in importance in Kenya and other areas of sub-Saharan Africa due to its ability to be cultivated for both food security and income production.” —Kenya (Chapter 32)

“Historically, the national diet was divided regionally: people who grew rice consumed rice almost exclusively and those who produced wheat consumed wheat almost exclusively.” —Persia (Chapter 52)

“The poor ate porridge made from coarse millet, barley, and oats. By the 15th century, buckwheat groats were cultivated. Today, they are called kasha and are closely identified with Russian foods.” —Russia (Chapter 27)

FOODS WITH CULTURAL SIGNIFICANCE

Food means more than just sustenance; it defines many of the traditions and customs found in each culture. The following chapter excerpts are examples of how food is culturally significant:

“Wat is Ethiopia’s national dish. It is placed on top of injera bread and served in a large basket. Typically, the food is eaten with the fingers by tearing off pieces of injera and dipping it into the wat.” —Ethiopia (Chapter 31)

“In the early afternoon in Argentina, long lines form at empanada shops. Empanadas came to Argentina with the first Spanish immigrants and now are a cultural phenomenon.” —Argentina (Chapter 42)

“Muslims do not eat any form of pork, or any meat that has been slaughtered without invoking God’s name (known as *halal* meat or *thabiha*), although some consider any nonpork meats to be *halal* and substitute *thabiha* for kosher.” —Arabian Peninsula (Chapter 47)

“Vegemite is probably the most notable cultural food in Australia today.” —Australia (Chapter 44)

“Traditionally, children were expected not to eat certain foods, for example, girls were not supposed to eat meat from birds but boys were expected to eat such meat.” —Botswana (Chapter 30)

“Pregnant women are discouraged from eating too much and taking prenatal vitamins, or from taking showers at night, because this is believed to make the baby too large and the labor difficult.” —Cambodia (Chapter 21)

“There are numerous Greek desserts that are popular in Greece and internationally. A hallmark of Greek desserts is that they are very sweet. There are sweets that use phyllo dough and are topped with syrup. Two such popular Greek desserts include baklava, which is layers of phyllo dough filled with walnuts, almonds, or a combination of both, and galaktobouriko (custard pie). In addition, kadaifi is a wheat-based (i.e., like shredded wheat) dessert filled with nuts and topped with syrup.” —Greece (Chapter 14)

“Eating eel on Christmas Eve symbolizes renewal and new beginning in the coming year, because eels shed their skin and replace it with new skin.” —Italy (Chapter 17)

“Most of the traditional vegetables used by the Luo are considered to be medicinal and are used in a variety of ways: treating simple wounds; dealing with *chira* (a curse or an illness caused by breaking social rules and customs related to cultivation, marriage, and sexuality), spirit possession, and the evil eye; and creating love potions and protective charms.” —Kenya (Chapter 32)

“The belief that beef has hot qualities for the body is commonly held by most Pakistanis in the Punjab region in particular, which is the reason for its low consumption.” —Pakistan (Chapter 22)

“Many Iranians believe in ‘hot’ and ‘cold’ properties of food, and making a dish that combines foods with opposing properties is the cornerstone of a balanced diet.” —Persia (Chapter 52)

“Kasha is believed to have healing properties and it is given to children and the sick. Honey is considered to have healing powers as well, and it is often mixed with milk, mineral water, or lemon juice to treat colds and coughs.” —Russia (Chapter 27)

“The smörgåsbord, literally translated ‘sandwich table,’ is often an important part of the festivities that mark special events and holidays, from weddings to Christmas.” —Sweden (Chapter 19)

COMMUNICATION AND COUNSELING TIPS FOR CULTURAL COMPETENCY

Cultural competency, or the lack therefore, plays an important role in the communication and counseling carried out by food and nutrition professionals. When cultural customs are unwittingly ignored or violated, the result can be rejection of necessary information. The following chapter excerpts are examples of contexts for which cultural competency is desirable:

“When it came to social activities, men and women never socialized together.” —Arabian Peninsula (Chapter 47)

“‘Mateship’ is an Australian cultural idiom that embodies the working-class ethos: equality, loyalty, and friendship.” —Australia (Chapter 44)

“Batswana also have totems in the form of animals that signify the tribe to which they belong, and it may not be culturally proper to offer a person a food item that is part of their totem.” —Botswana (Chapter 30)

“The Dutch are characteristically direct and straightforward. Although this directness may be misinterpreted as rudeness, when read through the lens of pragmatism the Dutch simply want to get to the heart of the matter immediately.” —The Netherlands (Chapter 12)

“The French prefer subtlety and discretion to bluntness and detail. The French are known to talk around an issue. In a counseling setting it is important to listen for nuances and hidden messages in their communications.” —France (Chapter 13)

“Keeping warm is considered an important measure to prevent illnesses such as colds or flu.” —Greece (Chapter 14)

“Haitians will appear to agree with a person of higher socioeconomic status even if they are not truly in agreement.” —Haiti (Chapter 38)

“For both men and women, the standard form of greeting is a handshake; however, a man should pause for a woman to extend her hand first.” —Hungary (Chapter 15)

“It is considered taboo to point directly at somebody because it might cause disease.” —Kenya (Chapter 32)

“Nepalese are very family/friend oriented. They do not like to do anything alone, so communicating any health information will most likely be better

received with family or friend(s) present.” —Nepal (Chapter 24)

GENERAL HEALTH AND NUTRITIONAL INDICATORS

This book contains vital information regarding the various health and nutritional indicators that are used to assess the overall health status of a culture. For instance, while some cultures experience an increase in the incidence of obesity, others suffer from malnutrition, undernutrition, anemia, and vitamin A deficiency. The following chapter excerpts provide a sample of the health and nutritional challenges that we face in the world today:

“Arabians prefer fermented forms of dairy products and have a high incidence of lactose intolerance.” —Arabian Peninsula (Chapter 47)

“In Australia, low iron stores have been reported in up to one third of children aged 1–3 years.” —Australia (Chapter 44)

“While undernourishment is not a significant threat, increasing rates of overweight and obesity have become a major public health concern. Data from the World Health Organization indicate that the per capita daily food consumption in Great Britain totals over 3400 calories.” —Great Britain (Chapter 11)

“Overall, the results showed a reduced presence of undernutrition and, importantly, increased overweight and obesity.” —Costa Rica (Chapter 37)

“Common health problems among Haitians include diabetes and hypertension. In children, malnutrition and anemia are frequently seen. HIV is also a big problem in Haiti.” —Haiti (Chapter 38)

“Hungary has one of the highest smoking rates in Europe. In the year 2000, 38.3% of males and 23% of females reported being ‘regular smokers.’ Standardized mortality rates for cardiovascular disorders in Hungarians less than 65 years are three times higher than the European average.” —Hungary (Chapter 15)

“Overall, Italians are one of the healthiest and longest-lived people; men live to an average age of 78.6 years and women live to an average age of 84.1 years. This is the highest life expectancy among Europeans, and many people believe it to be re-

lated to the Mediterranean diet, which includes red wine and olive oil.” —Italy (Chapter 17)

“Lactose intolerance was very common in Japan, because after weaning, children rarely had access to milk.” —Japan (Chapter 25)

“Diarrhea is a leading cause of mortality among Nepali infants and children. Food and water are withheld in the belief that such action will cure the illness, but it often compounds the dehydration problem.” —Nepal (Chapter 24)

“Nigerian children have suffered the most due to poor prevalence of breastfeeding, inadequate calories per person, crop failure, and lack of iron, vi-

tamin A, and iodine-containing foods. Compared with the rest of the world, Nigeria ranks high in infant mortality, iron-deficiency anemia, stunting, and wasting. With lack of safe water in some areas and poor immunity due to nutritional inadequacy, children are at high risk of infectious disease.” —Nigeria (Chapter 33)

“Sweden has a long history of public health care policy which includes national responsibility to provide health care to all and preventative health measures that underscore the country’s commitment to equality and security.” —Sweden (Chapter 19)



Introduction

Sari Edelstein, PhD, RD

Food, Cuisine, and Cultural Competency for Culinary, Hospitality, and Nutrition Professionals was created to provide useful information about various cuisines and cultures, including the traditions and sensibilities that characterize them. The book is coauthored primarily by nutrition experts and food lovers whose origins are rooted in the cultures about which they report. The text covers many more cultures, such as Botswana, Nigeria, Rwanda, Sudan, Ghana, Sierra Leone, Liberia, Afghanistan, and Bangladesh, than explored previously in other books. This is because the present era is more conducive to immigration, and people from diverse regions are now found all over the world. As food professionals, it behooves us to become familiar with as many cultures of the world as possible, because we will be serving clients from around the globe. Being properly informed when interacting with a person from another culture will empower the professional in terms of understanding cultural differences and developing the cross-cultural skills necessary to be effective in any counseling environment. Awareness of this fact, combined with actions taken to address it, leads to “cultural competency,” which, in this book, refers to an individual’s ability to interact consciously and effectively with persons of diverse cultures.

The book was created such that the instructor may hand-pick cultures from a larger selection for students to learn and become competent about. Thus, each chapter provides a stand-alone culture description. This allows the text to be customized for each classroom. Each chapter also provides cultural and history-related information as to how cuisines have evolved over the centuries to their present state, with regard to menus and recipes, as well as exploration of the cultural and religious traditions that have shaped them. Each chapter includes information on the following:

- *Culture and World Region.* In this section, the reader is given the geography of the region along with information about the climate, indigenous food supply, and the ethnic groups that reside there.
- *Language.* The number of languages spoken globally is staggering. Languages generally indicate the diversity and origin of the peoples in a given region; thus, each culture has its unique composition of languages and/or dialects.
- *Culture History.* Many cultures derive their identities from a combination of age-old traditions and the influence of recent immigration, which

adds to the diversity and richness of their cultural practices today. This section weighs the significance of such factors.

- *Food History Within the Culture.* In this section the reader encounters the culture's history in the context of its relevance to the cuisine. Determining factors, such as famines, floods, or degree of soil richness, are described to inform the reader as to why specific foods are plentiful in some civilizations and scarce in others.
- *Major Foods.* Each culture enjoys foods that represent religious, geographic, social, and economic choices. The reader learns pertinent details about each major food and what those foods represent to the culture.
 - *Protein Sources.* Each culture depends on a prominent protein source. Whether the country is located by the sea, which implies a diet plentiful in fish, or is a land-locked country dependent on animals for protein, the reader learns about the vital connection between geography and food resources of each culture.
 - *Starch Sources.* Soil cultivation often defines the starch sources of each culture, whether they be tubers or grains.
 - *Fat Sources.* The main fat sources of each culture are of particular interest in relation to health and potential longevity of its people. The reader is introduced to the Mediterranean diet in cultures that use olive oil prominently as compared with the trans- and saturated fats used more in the westernized world. The spread of fast food around the world has led to health problems that mirror those of the United States.
 - *Prominent Vegetables.* Similar to starches, the choice and quality of vegetables depends on soil quality along with climate and access to water.
 - *Prominent Fruits.* Fruit variability is vast, depending on distance from the equator, and prominent fruits change significantly from region to region.
 - *Spices and Seasonings.* Each culture has given the world an array of unique spice blends that define their culture's recipes and dishes.
 - *Beverages.* A diverse variety of beverages, from ancient mystical teas to malt beer, define many cultures.
 - *Desserts.* The joy of each culture is celebrated in its desserts!
- *Foods with Cultural Significance.* Each culture has recipes and foods that carry special cultural significance. The reader learns about the recipes and foods that play a role in the social and religious traditions of each society.
- *Typical Day's Menu.* Many culturally significant foods are included in a typical day's meal plan. The reader learns about how foods are served, combined with other dishes, and integrated into daily life.
- *Holiday Menus.* Food and holidays go together and often represent the traditions of a culture. The reader learns the significance of particular cultural and religious holidays, as well as the practices regarding the foods that accompany them.
- *Health Beliefs and Concerns.* Food and nutrition professionals will be interested in the health beliefs of each culture as well as some of the major dietary concerns facing their population.
- *General Health and Nutritional Indicators Summary.* This section discusses statistics that reflect the nutritional status of the country. Table I-1 provides the comprehensive table from UNICEF which lists the nutritional summary from many cultures and countries around the world.
- *Communication and Counseling Tips.* When serving clients from various cultures, professionals need to be culturally competent in communicating within the social norms of each culture. This section provides the necessary information in a practical manner, using the standard counseling model in most instances.
- *Primary Language of Food Names with English Translation.* Because language can be a barrier to providing cultural competence, the reader is given the names of foods in the culture's native tongue, and in most instances the phonetic pronunciation as well.
- *Observations from the Author.* Snippets of personal experience from authors enhance many chapters and give the reader an inside view of what it is like to be among people of another culture in their native country. Many authors offer whimsical lessons learned and amusing scenarios for readers to enjoy.
- *Featured Recipe.* Enjoy trying representative recipes from each culture.

TABLE I-1 Nutrition

Countries and Territories	Percent of infants with low birthweight 1998-2005*	Percent of children (1996-2005*) who are:			Percent of under-fives (1996-2005*) suffering from:			Vitamin A supplementation coverage rate (6-59 months) 2004	Percent of households consuming iodized salt 1998-2005*	
		exclusively breastfed (<6 months)	breastfed with complementary food (6-9 months)	still breastfeeding (20-23 months)	underweight		wasting			stunting
					moderate & severe	severe	moderate & severe			moderate & severe
Afghanistan	-	-	29	54	39	12	7	54	96t	28
Albania	5	6	24	6	14	1	11	34	-	62
Algeria	7	13	38	22	10	3	8	19	-	69
Andorra	-	-	-	-	-	-	-	-	-	-
Angola	12	11	77	37	31	8	6	45	77	35
Antigua and Barbuda	8	-	-	-	-	-	-	-	-	-
Argentina	8	-	-	-	4	-	1	4	-	90x
Armenia	7	33	57	15	4	0	5	13	-	97
Australia	7	-	-	-	-	-	-	-	-	-
Austria	7	-	-	-	-	-	-	-	-	-
Azerbaijan	12	7	39	16	7	1	2	13	14	26
Bahamas	7	-	-	-	-	-	-	-	-	-
Bahrain	8	34x,k	65x	41x	9x	2x	5x	10x	-	-
Bangladesh	36	36	69	90	48	13	13	43	83t	70
Barbados	11	-	-	-	-	-	-	-	-	-
Belarus	5	-	-	-	-	-	-	-	-	55
Belgium	8x	-	-	-	-	-	-	-	-	-
Belize	6	24k	54	23	-	-	-	-	-	90x
Benin	16	38	66	62	23	5	8	31	94t	72
Bhutan	15	-	-	-	19	3	3	40	-	95
Bolivia	7	54	74	46	8	1	1	27	42	90
Bosnia and Herzegovina	4	6	-	-	4	1	6	10	-	62
Botswana	10	34	57	11	13	2	5	23	62w	66
Brazil	8	-	30	17	6	1	2	11	-	88
Brunei Darussalam	10	-	-	-	-	-	-	-	-	-
Bulgaria	10	-	-	-	-	-	-	-	-	98
Burkina Faso	19	19	38	81	38	14	19	39	95t	45
Burundi	16	62	46	85	45	13	8	57	94	96
Cambodia	11	12	72	59	45	13	15	45	72t	14
Cameroon	13	24	79	29	18	4	5	32	81	88
Canada	6	-	-	-	-	-	-	-	-	-
Cape Verde	13	57k	64	13	-	-	-	-	-	0x
Central African Republic	14	17	77	53	24	6	9	39	79	86
Chad	22	2	77	65	37	14	14	41	84t	56
Chile	6	63	47	-	1	-	0	1	-	100
China	4	51	32	15	8	-	-	14	-	93
Colombia	9	47	65	32	7	1	1	12	-	92x
Comoros	25	21	34	45	25	-	8	44	7	82
Congo	-	19	78	21	15	3	7	26	94	-
Congo, Democratic Republic of the	12	24	79	52	31	9	13	38	81t	72
Cook Islands	3	19k	-	-	-	-	-	-	-	-
Costa Rica	7	35x,k	47x	12x	5	0	2	6	-	97x
Côte d'Ivoire	17	5	73	38	17	5	7	21	60	84
Croatia	6	23	-	-	1	-	1	1	-	90
Cuba	5	41	42	9	4	0	2	5	-	88
Cyprus	-	-	-	-	-	-	-	-	-	-
Czech Republic	7	-	-	-	-	-	-	-	-	-
Denmark	5	-	-	-	-	-	-	-	-	-
Djibouti	16	-	-	-	27	8	18	23	-	-
Dominica	11	-	-	-	-	-	-	-	-	-
Dominican Republic	11	10	41	16	5	1	2	9	-	18
Ecuador	16	35	70	25	12	-	-	26	-	99

(continues)

TABLE I-1 Nutrition (Continued)

Countries and Territories	Percent of infants with low birthweight 1998-2005*	Percent of children (1996-2005*) who are:			Percent of under-fives (1996-2005*) suffering from:			Vitamin A supplementation coverage rate (6-59 months) 2004	Percent of households consuming iodized salt 1998-2005*	
		exclusively breastfed (<6 months)	breastfed with complementary food (6-9 months)	still breastfeeding (20-23 months)	underweight		wasting			stunting
					moderate & severe	severe	moderate & severe			moderate & severe
Egypt	12	38	67	37	6	1	4	18	-	78
El Salvador	7	24	76	43	10	1	1	19	-	62
Equatorial Guinea	13	24	-	-	19	4	7	39	-	33
Eritrea	14	52	43	62	40	12	13	38	50	68
Estonia	4	-	-	-	-	-	-	-	-	-
Ethiopia	15	49	54	86	38	11	11	47	52	28
Fiji	10	47x,k	-	-	-	-	-	-	-	31x
Finland	4	-	-	-	-	-	-	-	-	-
France	7	-	-	-	-	-	-	-	-	-
Gabon	14	6	62	9	12	2	3	21	-	36
Gambia	17	26	37	54	17	4	8	19	27	8
Georgia	7	18k	12	12	3	0	2	12	-	68
Germany	7	-	-	-	-	-	-	-	-	-
Ghana	16	53	62	67	22	5	7	30	95	28
Greece	8	-	-	-	-	-	-	-	-	-
Grenada	8	39k	-	-	-	-	-	-	-	-
Guatemala	12	51	67	47	23	4	2	49	18w	67
Guinea	16	27	41	71	26	7	9	35	95t	68
Guinea-Bissau	22	37	36	67	25	7	10	30	64	2
Guyana	13	11	42	31	14	3	11	11	-	-
Haiti	21	24	73	30	17	4	5	23	-	11
Holy See	-	-	-	-	-	-	-	-	-	-
Honduras	14	35	61	34	17	2	1	29	40	80
Hungary	9	-	-	-	-	-	-	-	-	-
Iceland	4	-	-	-	-	-	-	-	-	-
India	30	37k	44	66	47	18	16	46	51w	57
Indonesia	9	40	75	59	28	9	-	-	73t	73
Iran (Islamic Republic of)	7x	44	-	0	11	2	5	15	-	94
Iraq	15	12	51	27	12	3	8	23	-	40
Ireland	6	-	-	-	-	-	-	-	-	-
Israel	8	-	-	-	-	-	-	-	-	-
Italy	6	-	-	-	-	-	-	-	-	-
Jamaica	10	-	-	-	4	-	4	3	-	100
Japan	8	-	-	-	-	-	-	-	-	-
Jordan	12	27	70	12	4	1	2	9	-	88
Kazakhstan	8	36	73	17	4	0	2	10	-	83
Kenya	10	13	84	57	20	4	6	30	63	91
Kiribati	5	80x,k	-	-	-	-	-	-	58	-
Korea, Democratic People's Republic of	7	65	31	37	23	8	7	37	95t	40
Korea, Republic of	4	-	-	-	-	-	-	-	-	-
Kuwait	7	12k	26	9	10	3	11	24	-	-
Kyrgyzstan	7x	24	77	21	11	2	3	25	95	42
Lao People's Democratic Republic	14	23	10	47	40	13	15	42	48	75
Latvia	5	-	-	-	-	-	-	-	-	-
Lebanon	6	27k	35	11	4	-	5	11	-	92
Lesotho	13	36	79	60	20	4	4	38	71	91
Liberia	-	35	70	45	26	8	6	39	95	-
Libyan Arab Jamahiriya	7x	-	-	23x	5x	1x	3x	15x	-	90x
Liechtenstein	-	-	-	-	-	-	-	-	-	-
Lithuania	4	-	-	-	-	-	-	-	-	-
Luxembourg	8	-	-	-	-	-	-	-	-	-
Madagascar	17	67	78	64	42	11	13	48	89t	75

TABLE I-1 Nutrition (Continued)

Countries and Territories	Percent of infants with low birthweight 1998-2005*	Percent of children (1996-2005*) who are:			Percent of under-fives (1996-2005*) suffering from:				Vitamin A supplementation coverage rate (6-59 months) 2004	Percent of households consuming iodized salt 1998-2005*
		exclusively breastfed (<6 months)	breastfed with complementary food (6-9 months)	still breastfeeding (20-23 months)	underweight		wasting	stunting		
					moderate & severe	severe	moderate & severe	moderate & severe		
Malawi	16	53	78	80	22	5	5	48	57	49
Malaysia	9	29k	-	12	11	1	-	-	-	-
Maldives	22	10	85	-	30	7	13	25	-	44
Mali	23	25	32	69	33	11	11	38	97	74
Malta	6	-	-	-	-	-	-	-	-	-
Marshall Islands	12	63x,k	-	-	-	-	-	-	24	-
Mauritania	-	20	78	57	32	10	13	35	95t	2
Mauritius	14	21k	-	-	15x	2x	14x	10x	-	0x
Mexico	8	-	-	-	8	1	2	18	-	91
Micronesia (Federated States of)	18	60k	-	-	-	-	-	-	74	-
Moldova, Republic of	5	46	66	2	4	1	4	8	-	59
Monaco	-	-	-	-	-	-	-	-	-	-
Mongolia	7	51	55	57	7	1	3	20	93t	75
Montenegro‡	-	-	-	-	-	-	-	-	-	-
Morocco	15	31	66	15	10	2	9	18	-	59
Mozambique	15	30	80	65	24	6	4	41	26	54
Myanmar	15	15k	66	67	32	7	9	32	96t	60
Namibia	14	19	57	37	24	5	9	24	-	63
Nauru	-	-	-	-	-	-	-	-	-	-
Nepal	21	68	66	92	48	13	10	51	97t	63
Netherlands	-	-	-	-	-	-	-	-	-	-
New Zealand	6	-	-	-	-	-	-	-	-	83
Nicaragua	12	31	68	39	10	2	2	20	98	97
Niger	13	1	56	61	40	14	14	40	-	15
Nigeria	14	17	64	34	29	9	9	38	85t	97
Niue	0	-	-	-	-	-	-	-	-	-
Norway	5	-	-	-	-	-	-	-	-	-
Occupied Palestinian Territory	9	29k	78	11	5	1	3	10	-	64
Oman	8	-	92	73	18	1	7	10	95w	61
Pakistan	19x	16x,k	31x	56x	38	13	13	37	95t	17
Palau	9	59x,k	-	-	-	-	-	-	-	-
Panama	10	25x	38x	21x	8	1	1	18	-	95
Papua New Guinea	11x	59	74	66	-	-	-	-	32	-
Paraguay	9	22	60	-	5	-	1	14	-	88
Peru	11	64	81	41	8	0	1	24	-	91
Philippines	20	34	58	32	28	-	6	30	85t	56
Poland	6	-	-	-	-	-	-	-	-	-
Portugal	8	-	-	-	-	-	-	-	-	-
Qatar	10	12k	48	21	6x	-	2x	8x	-	-
Romania	8	16	41	-	3	0	2	10	-	53
Russian Federation	6	-	-	-	3x	1x	4x	13x	-	35
Rwanda	9	90	69	77	23	4	4	45	95t	90
Saint Kitts and Nevis	9	56k	-	-	-	-	-	-	-	100
Saint Lucia	10	-	-	-	-	-	-	-	-	-
Saint Vincent and the Grenadines	10	-	-	-	-	-	-	-	-	-
Samoa	4x	-	-	-	-	-	-	-	-	-
San Marino	-	-	-	-	-	-	-	-	-	-
Sao Tome and Principe	20	56	53	42	13	2	4	29	76t	74
Saudi Arabia	11x	31k	60	30	14	3	11	20	-	-
Senegal	18	34	61	42	17	3	8	16	95	41
Serbia‡	-	-	-	-	-	-	-	-	-	-
Seychelles	-	-	-	-	-	-	-	-	-	-

(continues)

TABLE I-1 Nutrition (Continued)

Countries and Territories	Percent of infants with low birthweight 1998-2005*	Percent of children (1996-2005*) who are:			Percent of under-fives (1996-2005*) suffering from:				Vitamin A supplementation coverage rate (6-59 months) 2004	Percent of households consuming iodized salt 1998-2005*
		exclusively breastfed (<6 months)	breastfed with complementary food (6-9 months)	still breastfeeding (20-23 months)	underweight		wasting	stunting		
					moderate & severe	severe	moderate & severe	moderate & severe		
Sierra Leone	23	4	51	53	27	9	10	34	95t	23
Singapore	8	-	-	-	3	0	2	2	-	-
Slovakia	7	-	-	-	-	-	-	-	-	-
Slovenia	6	-	-	-	-	-	-	-	-	-
Solomon Islands	13x	65k	-	-	-	-	-	-	-	-
Somalia	-	9	13	8	26	7	17	23	6	-
South Africa	15	7	46	-	12	2	3	25	37	62
Spain	6x	-	-	-	-	-	-	-	-	-
Sri Lanka	22	53	-	73	29	-	14	14	57w	94
Sudan	31	16	47	40	41	15	16	43	70	1
Suriname	13	9	25	11	13	2	7	10	-	-
Swaziland	9	24	60	25	10	2	1	30	86	59
Sweden	4	-	-	-	-	-	-	-	-	-
Switzerland	6	-	-	-	-	-	-	-	-	-
Syrian Arab Republic	6	81k	50	6	7	1	4	18	-	79
Tajikistan	15	41	91	55	-	-	5	36	98t	28
Tanzania, United Republic of	10	41	91	55	22	4	3	38	94t	43
Thailand	9	4x,k	71x	27x	18x	2x	5x	13x	-	63
The former Yugoslav Republic of Macedonia	6	37	8	10	6	1	4	7	-	94
Timor-Leste	12	31	82	35	46	15	12	49	43	72
Togo	18	18	65	65	25	7	12	22	95t	67
Tonga	0	62k	-	-	-	-	-	-	-	-
Trinidad and Tobago	23	2	19	10	6	1	4	4	-	1
Tunisia	7	47	-	22	4	1	2	12	-	97
Turkey	16	21	38	24	4	1	1	12	-	64
Turkmenistan	6	13	71	27	12	2	6	22	-	100
Tuvalu	5	-	-	-	-	-	-	-	-	-
Uganda	12	63	75	50	23	5	4	39	68	95
Ukraine	5	22	-	-	1	0	0	3	-	32
United Arab Emirates	15x	34x,k	52x	29x	14x	3x	15x	17x	-	-
United Kingdom	8	-	-	-	-	-	-	-	-	-
United States	8	-	-	-	2	0	6	1	-	-
Uruguay	8	-	-	-	5x	1x	1x	8x	-	-
Uzbekistan	7	19	49	45	8	2	7	21	86t	57
Vanuatu	6	50k	-	-	-	-	-	-	-	-
Venezuela (Bolivarian Republic of)	9	7k	50	31	5	1	4	13	-	90
Viet Nam	9	15	-	26	27	4	8	31	95t,w	83
Yemen	32x	12	76	-	46	15	12	53	20	30
Zambia	12	40	87	58	20	-	6	50	50	77
Zimbabwe	11	33	90	35	17	3	5	26	20	93
MEMORANDUM										
Serbia and Montenegro (pre-cession)	4	11k	33	11	2	0	4	5	-	73
SUMMARY INDICATORS										
Sub-Saharan Africa	14	30	67	55	28	8	9	37	73	67
Eastern and Southern Africa	13	40	69	63	27	7	7	40	60	60
West and Central Africa	15	20	65	48	28	9	10	35	85	73
Middle East and North Africa	15	30	59	24	16	4	8	24	-	65
South Asia	29	38	47	69	45	16	14	44	62	54
East Asia and Pacific	7	43	43	27	15	-	-	19	81**	85
Latin America and Caribbean	9	-	49	26	7	1	2	15	-	86

TABLE I-1 Nutrition (Continued)

Countries and Territories	Percent of infants with low birthweight 1998–2005*	Percent of children (1996–2005*) who are:			Percent of under-fives (1996–2005*) suffering from:			Vitamin A supplementation coverage rate (6–59 months) 2004	Percent of households consuming iodized salt 1998–2005*	
		exclusively breastfed (<6 months)	breastfed with complementary food (6–9 months)	still breastfeeding (20–23 months)	underweight	wasting	stunting			
					moderate & severe	severe	moderate & severe	moderate & severe		
CEE/CIS	9	22	47	28	5	1	3	14	–	50
Industrialized countries [§]	7	–	–	–	–	–	–	–	–	–
Developing countries [§]	16	36	52	46	27	10	10	31	68**	71
Least developed countries [§]	19	34	64	65	35	10	10	42	75	53
World	15	36	52	46	25	9	9	30	68**	70

[†] Due to the cession in June 2006 of Montenegro from the State Union of Serbia and Montenegro, and its subsequent admission to the UN on 28 June 2006, disaggregated data for Montenegro and Serbia as separate States are not yet available. Aggregated data presented are for Serbia and Montenegro pre-cession (see Memorandum item).

[§] Also includes territories within each country category or regional group. Countries and territories in each country category or regional group are listed on page XX.

NOTES

– Data not available.

x Data refer to years or periods other than those specified in the column heading, differ from the standard definition, or refer to only part of a country.

k Refers to exclusive breastfeeding for less than four months.

* Data refer to the most recent year available during the period specified in the column heading.

t Identifies countries that have achieved a second round of vitamin A coverage great than or equal to 70%.

** Excludes China.

w Identifies countries with vitamin A supplementation programs that do not target children all the way up to 59 months of age.

DEFINITIONS OF THE INDICATORS

Low birthweight: Infants who weigh less than 2500 grams (or 5 lbs. 8 oz.).

Underweight (moderate and severe): Below minus two standard deviations from median weight for age of reference population.

Underweight (severe): Below minus three standard deviations from median weight for age of reference population.

Wasting (moderate and severe): Below minus two standard deviations from median weight for height of reference population.

Stunting (moderate and severe): Below minus two standard deviations from median height for age of reference population.

Vitamin A: Percentage of children aged 6–59 months who have received at least one high dose of vitamin A capsules in 2004.

Iodized salt consumption: Percentage of households consuming adequately iodized salt (15 ppm or more).

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