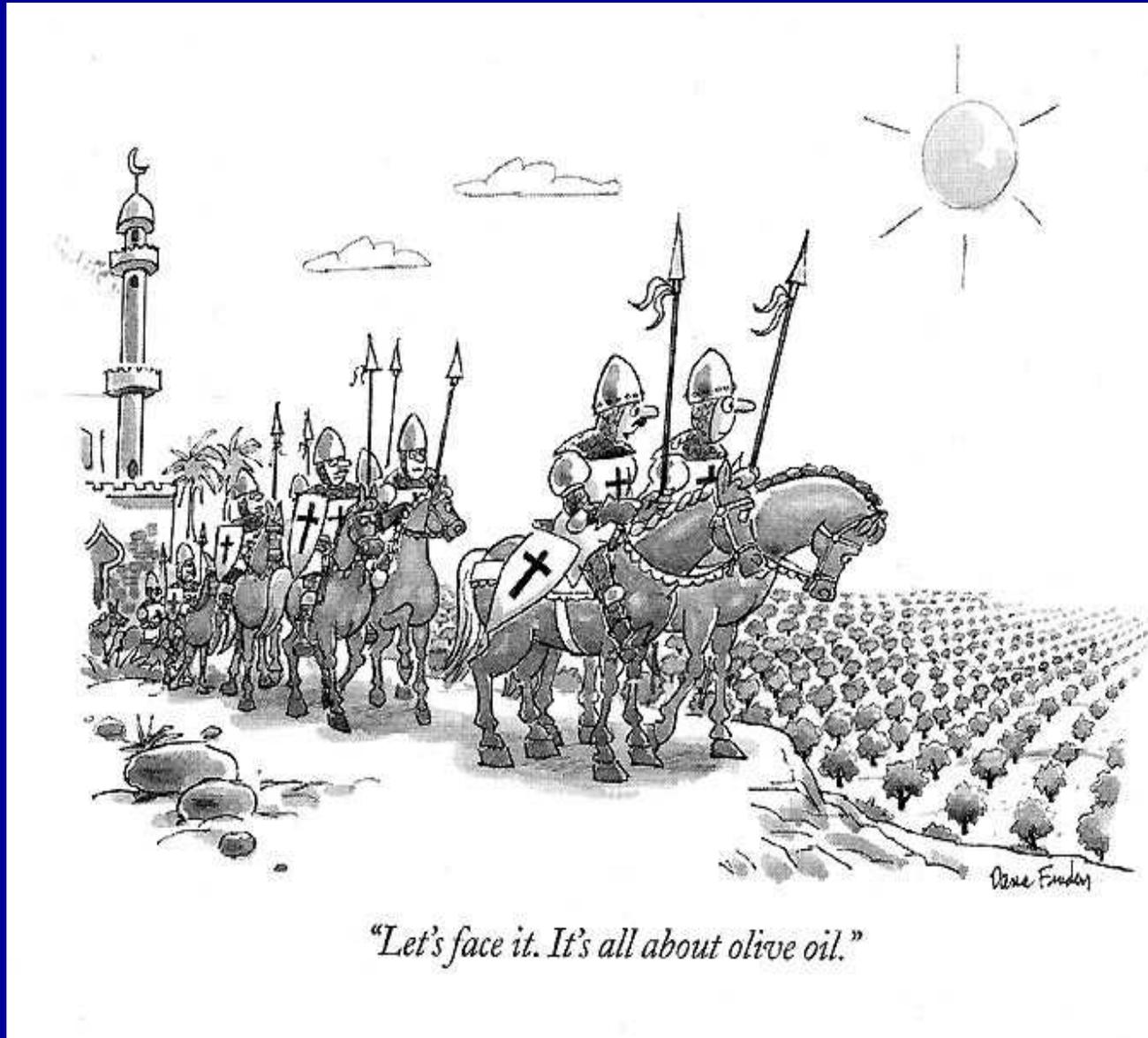




CALIFORNIA and WORLD OLIVE OIL STATISTICS

**Production Short Course
April 1 and 2, 2004**

How important is Olive Oil?



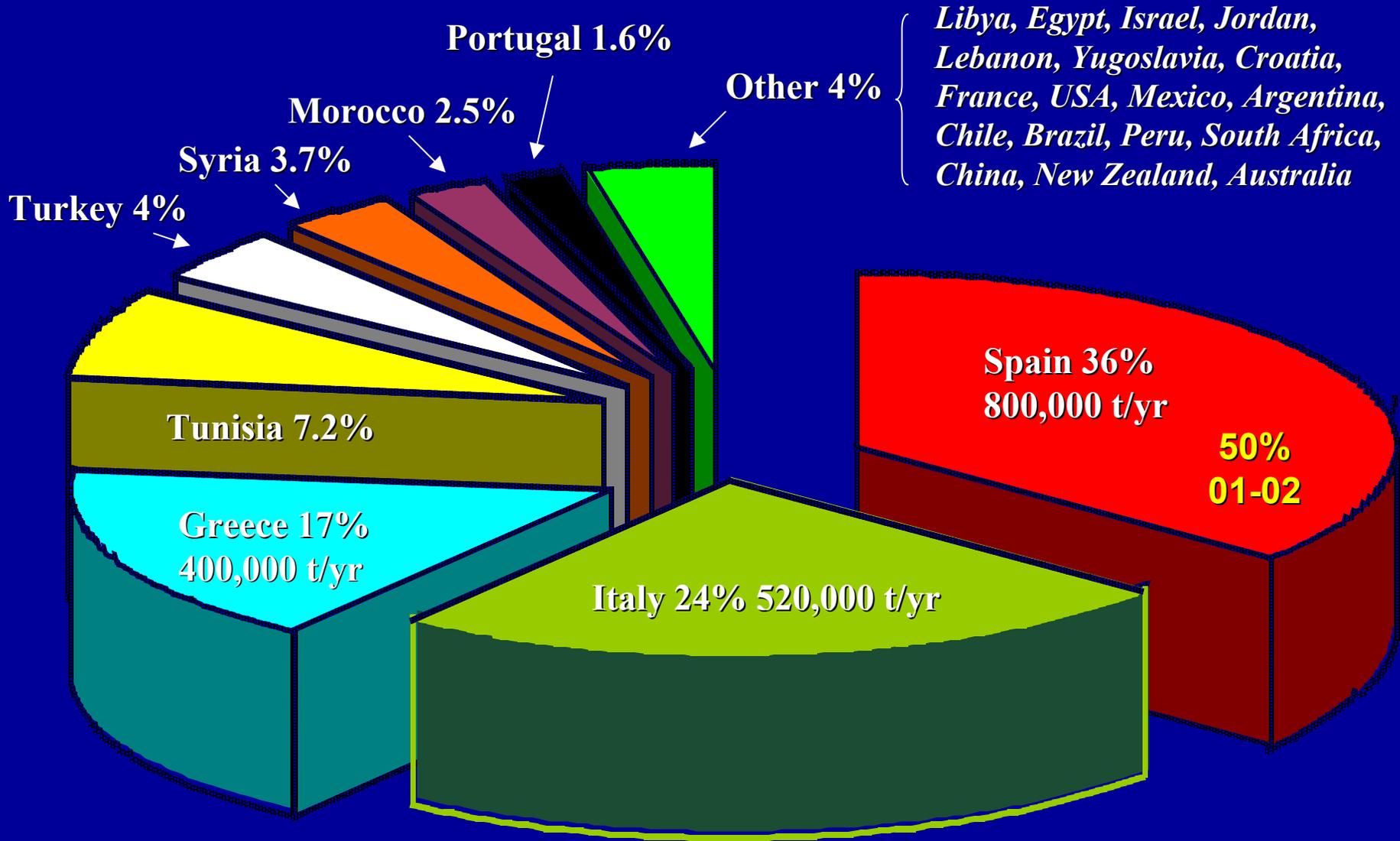
"Let's face it. It's all about olive oil."

World Olive Oil Production



Olive oil represents about 3% of all fats and oils consumed in the world

WORLD OLIVE OIL PRODUCTION



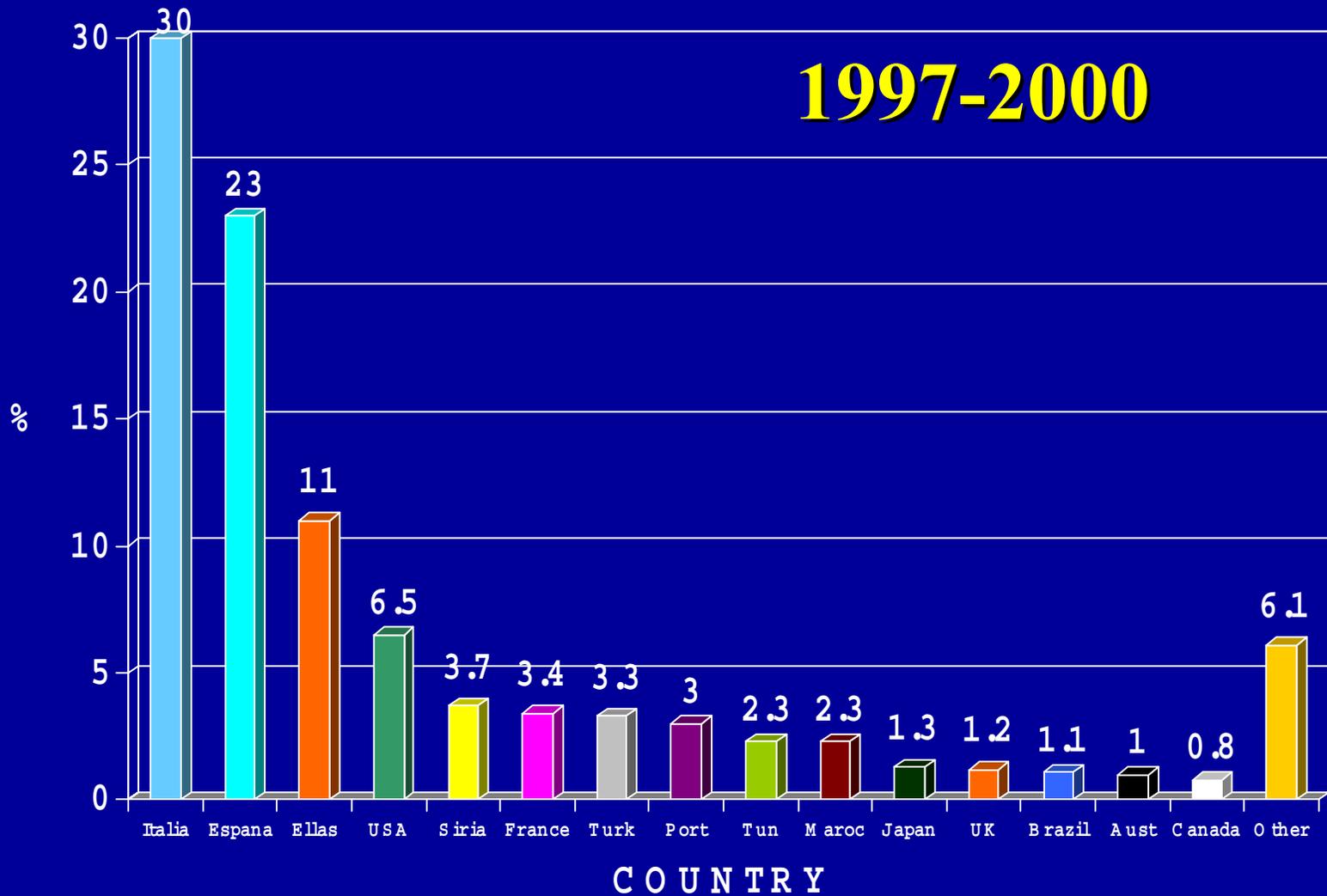
Total World Production: ~ 2.2 million metric t/yr

IOOC Data 1997-2000

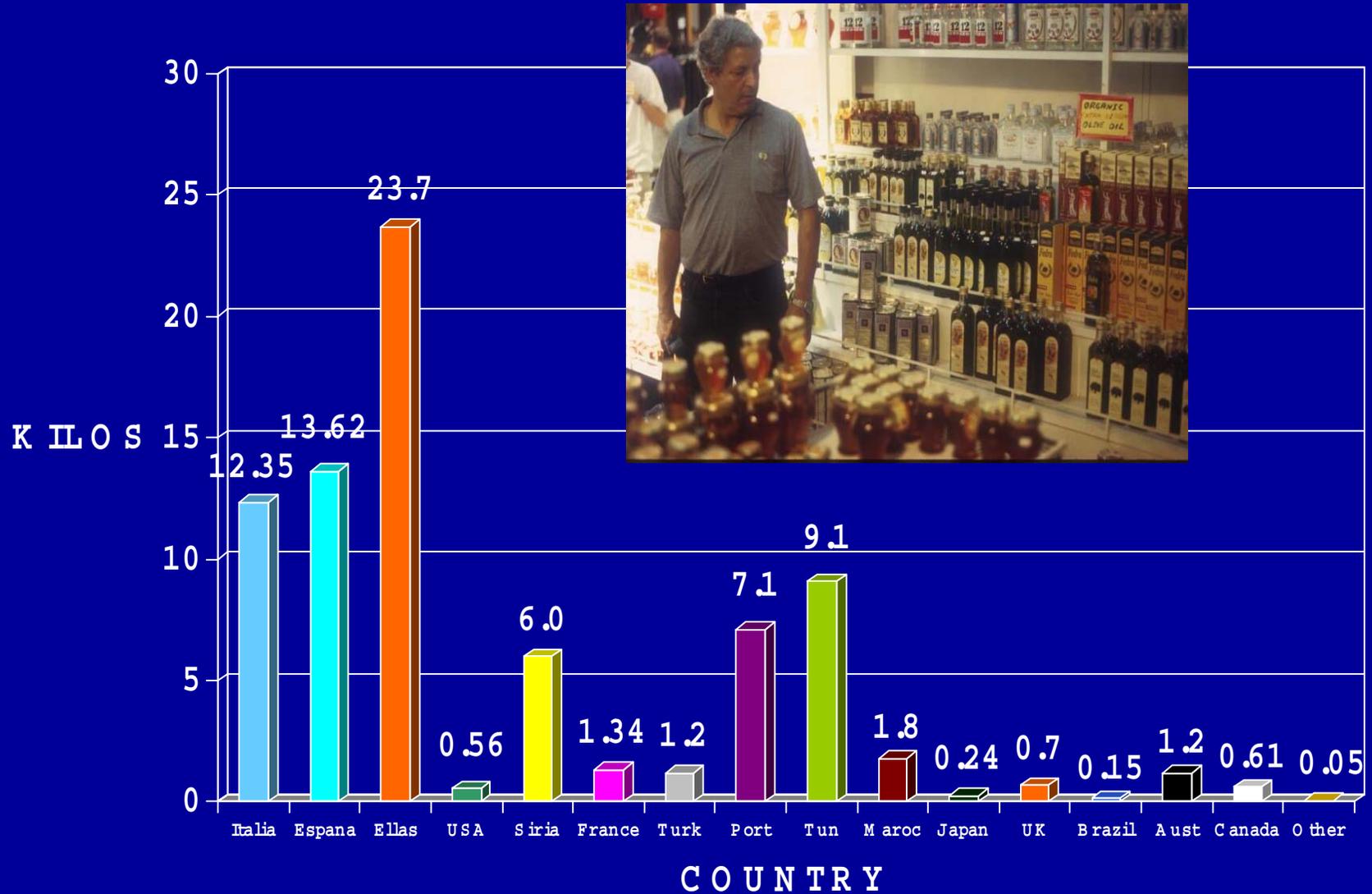
WORLD OLIVE ACREAGE

- Spain ~ 6 million **25%**
- Tunisia ~ 3.8 million **16%**
- Italy ~ 3.5 million **15%**
- Greece 2.5 million **11%**
- Portugal 1.3 million **6%**
- Turkey 1.2 million **5%**
- Morocco 1.1 million **5%**
- Syria 1.0 million **5%**
- Argentina 245,000 **1%**
- Australia ~ 100,000 **0.4%**
- USA ~ 35,000 **table** **0.15%**
~ 5,000 **oil** **0.02%**
- **World ~ 23.3 million**

WORLD OLIVE OIL CONSUMPTION



PER CAPITA CONSUMPTION OF OLIVE OIL



Olive Oil

Per Capita Consumption

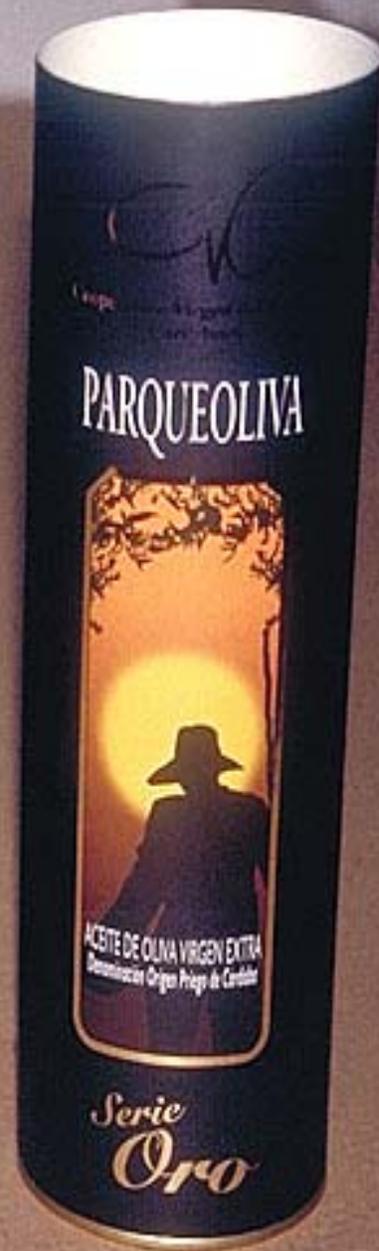
Greece	26.1 liters <i>(½ liter/wk)</i>
Spain	15.0 liters
Italy	13.5 liters
EU	5.4 liters
Australia	1.2 liters
USA	0.6 liters

Source: IOOC data 2002

SPANISH OLIVE OIL TRENDS

- **6 million acres of olives**
- **80 % non irrigated – 1 ton/acre**
- **1 million new acres in last 10 years**
- **Irrigated – 4 tons/acre annually**
- **Super-high-density System**
- **EU subsidy ~ \$0.70/liter (not for new plantings)**
- **Subsidy \$100-200/acre for organic**
- **Most excess sold to Italy**
- **700-1500 new brands in last 3 years**

**Award Winning Extra
Virgin \$8.50 per 750ml**



Spanish Production by Region

- **Andalucia ~ 80%**
- **Castilla La Mancha ~ 7%**
- **Extremadura ~ 5%**
- **Catalonia ~ 4%**
- **Comunidad Valenciana ~ 3%**

Cordoba





**Olive Trees as far as you can see
6,000,000 acres**



Spanish Mills

- ~ 2,000 total
- Many large mills are cooperatives
- Numerous small artisan mills
- 90% + 2 phase decanters
- 700 to 1,500 brands in last 3 years

Carcabuey Mill 8 lines – 600 tons per day



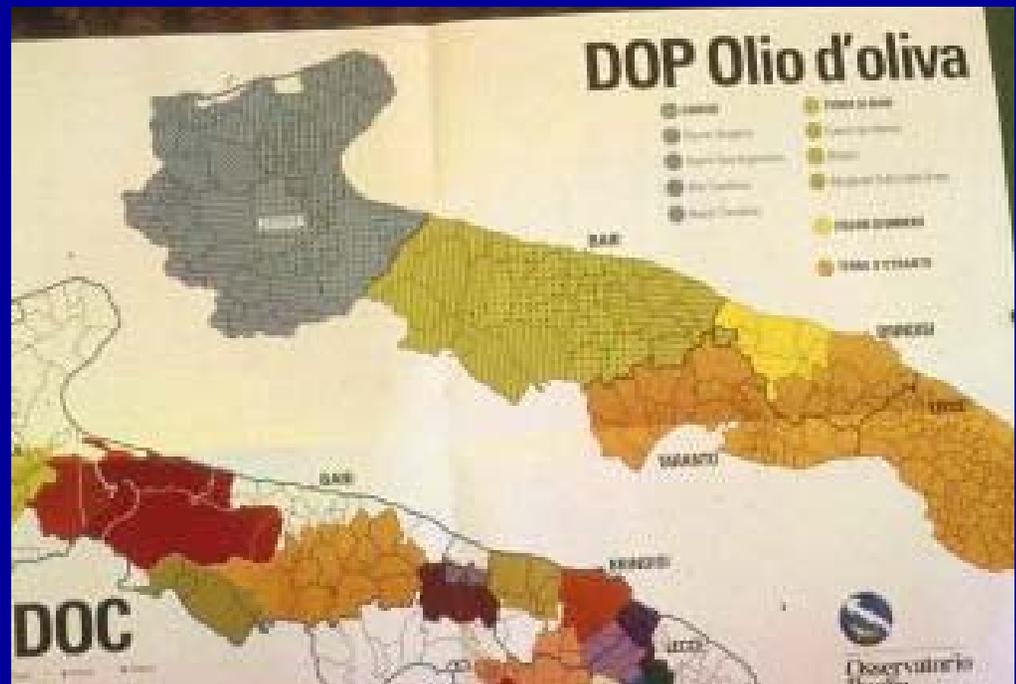


Italy Trends

- **20-24% of production with 15% trees**
- **6,300 Mills – mostly artisan (5 tons/day)**
- **Some large in the South – 85% of oil**
- **Tuscany = 3.2%**
- **Small properties and high labor costs**
- **No excess production**
- **Buys bulk – refines – blends - resells**

Italian Production by Region

- Liguria – 1%
- Toscana – 3.2%
- Umbria – 1.9%
- Lazio – 4.5%
- Abruzzo – 3.7%
- Puglia – 42%
- Calabria – 23%
- Sardinia – 7%
- Sicily – 10%
- Other – 5%





South and North



Spain & Italy Orchards

	<u>Italy</u>	<u>Spain</u>
All ag in Olives	5%	15%
New plantings	~ 0 acres	~ 1 million acres
Growers with < 1 hectare	42%	~ 0
1 – 3 hectares	31%	11%
3 – 30 hectares	27%	47%
30 – 200 hectares	Few	32%
200 – 1,000 hectares	~ 0	10%

Spanish & Italian Mills

1999

	<u>Italy</u>	<u>Spain</u>
Number of mills	6,200	1,850
Mill types	11% press 50% 3-phase 39% 2-phase	3% press 10% 3-phase 87% 2-phase
Size	Small	Large



Greek Trends

- Modernized out of 3rd World Presses
- Decanters 2 & 3 phase
- 10 % of trees = 17% production
- Many small farms
- Crete 30% - Peloponisos 30%
- Bulk sales to Italy
- Internal consumption – low cost





New Artisan Products



Low Cost Bulk Products

North Africa & Mid-East

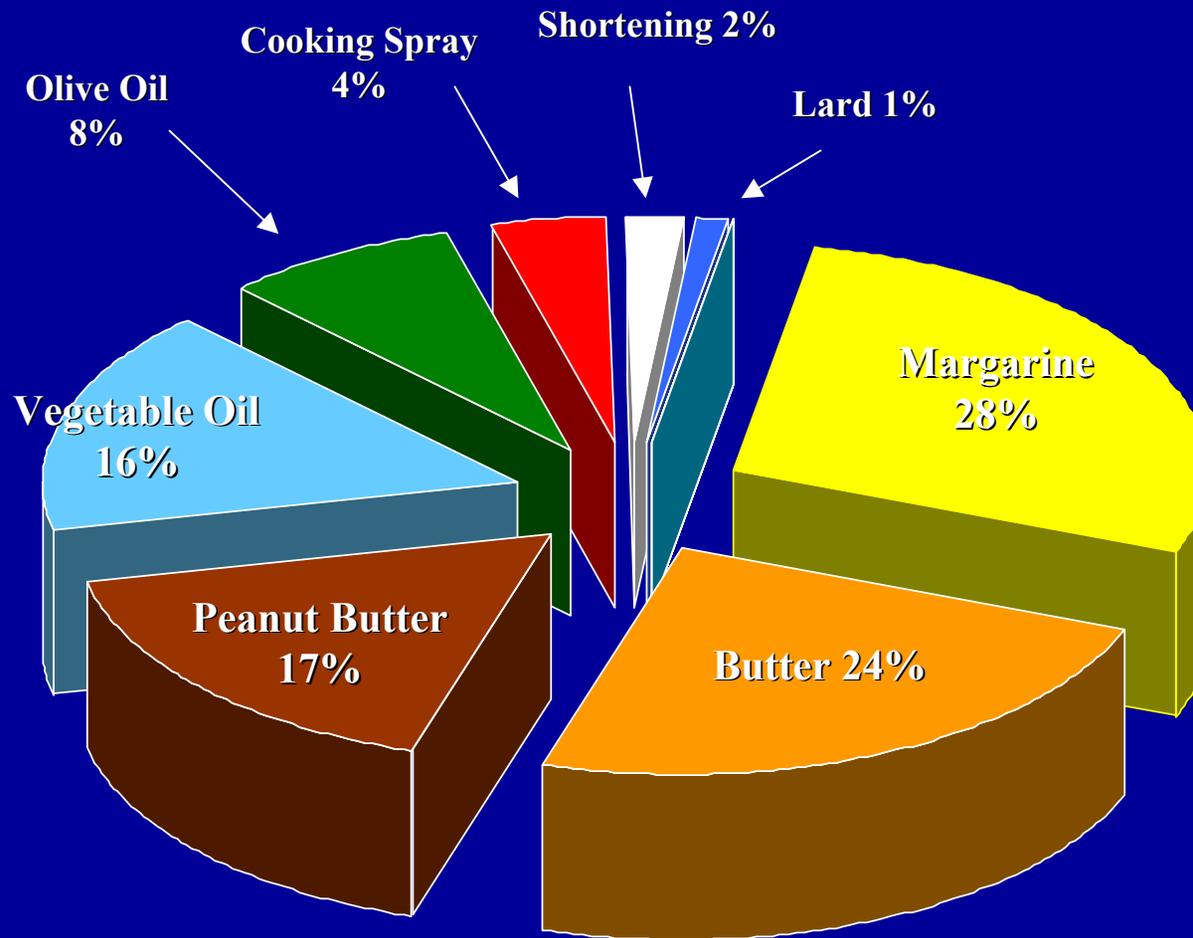
Tunisia, Turkey, Syria, Morocco, Algeria, Libya, Egypt, Israel, Palestinian National Authority, Jordan, and Lebanon

- **Very dry – low production**
- **~ 50% acreage ~ 20% production**
- **Old equipment**
- **Poor sanitation**
- **Low wages and prices**
- **Heat**
- **New investment from US and Europe**

New World

- **Australia - soon 4-5% of world's EV**
- **New Zealand - Small artisan**
- **Argentina – 100,000 – 250,000 acres**
- **Chile – 5,000 acres**
- **China - ????????**
- **Mexico - South Africa – Brazil - Peru**

FATS & OILS CONSUMED IN THE US MARKET (2001)



Packaged Foods, New York

Olive oil represents ONLY about 3% of all fats and oils consumed in the world

Olive Oil Sales in US Markets

1994 to 1995

+ 12%

1995 to 1996

+ 27%

1996 to 1997

+ 31%

1997 to 1998

+ 18%

1999 to 2000

+10 %

2000 to 2001

+ 1%

1991 to 2003

+ 100%

OLIVE OIL IN CALIFORNIA

- California Production & Potential



CA ESTIMATES & TRENDS

~ 35,000 acres - table olives

~ 3,000 new acres - oil olives

~ 4,000 acres of - old oil olives

~ 350,000 gallons of CA oil in 2003

US consumption up ~ 100% in 8 years

US imports ~ 60 million gallons

California produces ~ 0.6% of US
consumption

(at 4 tons/acre & 40 gal/ton = 375,000 acres)

CAL OIL OLIVE ACREAGE *(est.)*

• Calaveras- El Dorado – Placer – Nevada		200
• Ventura – SLOB – Sta. Barbara		600
• Solano – Yolo		180
• Marin – Sonoma	(old 500)	520
• Napa	(old 500)	400
• Butte – Glen - Tehama	(old 1,200)	650
• LA – San Diego		150
• Other		<u>300</u>
	TOTAL	3,000

35,000 acres of table olives – 80% Manzanillo – 5% Mission

California Olive Oil Production in Gallons

1996 – 1997

123,000

1997 – 1998

200,000

1998 – 1999

236,000

1999 – 2000

250,000

2000 – 2001

135,000

2001 – 2002

350,000

2002 – 2003

400,000

PRICES FOR OILS (Euros)

January 2002

BULK

- Virgin Spain – 2.64/kg
 - Extra Virgin Italy – 2.79/kg
- Refined Spain – 1.89/kg
- Refined Italy – 1.96/kg
- Lamp oil Spain – 0.54/kg
 - Pomace oil – 0.28/kg
 - Olive – Sunflower – 0.29/kg
- Sunflower Italy – 0.82/kg

RETAIL IN MADRID

- Carbonell refined 2.55/L
 - Cazorliva EV 2.20/L
- Parqueoliva 4.69/0.75L
- Oleastrum EV 5.91/0.75L
 - Nuñez de Prado EV 4.87/0.5L
 - Lerida EV 11.48/L
- Fuenroble EV 17.06/L

(California bulk = \$22/gallon)

(California retail = \$15-\$20/bottle)

LOWERING COSTS

- **Mechanize Harvest**
- **Reduce cultural costs**
- **Lower land costs**
- **Come into production early (3rd yr.)**
- **Consistent – High annual yields**
- **Lower Marketing costs**
- **Direct Sales from Tasting Room**



SUPER-HIGH DENSITY PRODUCTION SYSTEM

- **5 x 13 = 670 trees/ acre** **4 x 12 = 907 trees/acre**
- **Arbequina – Arbosana – Koroneiki**



Production Cost Comparisons

Coastal High Density Oil

- Establishment
\$11,128/acre
- Production
\$4,600/acre
- 2.5 tons/acre
 - \$1,840/ton
- Full production
10 yrs

Valley Super-High-Density Oil

- Establishment
\$9,000/acre
- Production
\$2,349/acre
- 5 tons/acre
 - \$470/ton
- Full production
5 yrs

Red Wine Coastal

- Establishment
\$23,709/acre
- Production
\$7,000/acre
- 5 tons/acre
 - \$1,400/ton
- Full production
5 yrs

What Costs? PER ACRE

- **Land (Capitol Recovery) – 13% to 25%**
- **Marketing – 17% to 18%**
- **Overhead – 4.7% to 5.5%**

Coastal – 47.5% reduction

Central Valley – 35.7% reduction

coststudies.ucdavis.edu