Disclosures

• No conflict of interest
Data sources

- WHO European Health for all database (HFA-DB)
- WHO Mortality database (WHO-MDB)

- Provides health statistics for 52 Member States of the WHO European Region
- Initiated mid-80s
- Data mainly submitted by member states
- Data from international organisations, e.g.,
  - OECD health database, Paris
  - United Nations Food and Agriculture Organization, Rome
  - UNESCO statistical yearbook, Paris
- New data is continuously collected
- June 2008
Groups of countries

• **European Region:** the 52 countries of the WHO Region

• **EU:** the Member States of the European Union

• **EU-15:** the 15 Member States of the European Union prior to 1 May 2004

• **EU-10:** the 10 Member States which joined the European Union from 1 May 2004

• **CIS:** the 12 countries of the Commonwealth of Independent States, which are 12 out of 15 countries of the former USSR
Increasing Life Expectancy
LIFE EXPECTANCY AT BIRTH

Years
- 65 to 70
- 70 to 75
- 75 to 80
- >=80
- No data

[Map showing life expectancy at birth across Europe]
Europe is ageing rapidly
Proportion of 65+ years of age

% 65+

- EU-15
- European Union
- European Region
- EU-10
- CIS
Age pyramid for Europe in 2008

Age (years)

Numbers per million

Men

Women
Age pyramid for Europe in 2050

Numbers per million

Age 90+ 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0

Men

Women
↑ Age = ↑ CVD
Major causes of death by age

Cardiovascular diseases  Respiratory diseases  Digestive disease  Cancer  External causes of injury  Other
Decreasing CVD mortality?
Standardised Cardiovascular Mortality

No / 1,000

- CIS
- EU-10
- European Region
- European Union
- EU-15

MEN

- 1980
- 1985
- 1990
- 1995
- 2000
- 2005
- 2010
Improved Secondary Prevention since 1995

- Antithrombotics
- Lipid lowering
- Beta-blockers
- ACE-I/ARB

Surveys:
- 1995
- 2005-2006

Conditions:
- EA-I
- EA-II
- ACS I
- CR
- AP
- DM
- ACS II
- PCI
Standardisation procedure

• Large heterogeneity in age across countries

• Standardisation is needed for *comparison* of health indicators (e.g., mortality)

• Age-standardised death rates are calculated using the direct method
  – They represent what the crude rate would have been if the population had the same age distribution as the European standard population, as follows …
**European standard population**

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>European standard population</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1600</td>
</tr>
<tr>
<td>1-4</td>
<td>6400</td>
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<tr>
<td>5-9</td>
<td>7000</td>
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<td>10-14</td>
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<td>25-29</td>
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<td>30-34</td>
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<td>35-39</td>
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<tr>
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<td>60-64</td>
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<td>65-69</td>
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<tr>
<td>70-74</td>
<td>3000</td>
</tr>
<tr>
<td>75-79</td>
<td>2000</td>
</tr>
<tr>
<td>80-84</td>
<td>1000</td>
</tr>
<tr>
<td>85 +</td>
<td>1000</td>
</tr>
<tr>
<td>Total</td>
<td>100000</td>
</tr>
</tbody>
</table>
Crude Cardiovascular Mortality

No / 1,000


MEN

CIS
EU-10
European Region
European Union
EU-15
Increasing number of hospital discharges
Hospital Discharge Cardiovascular Disease

No / 1,000 inhabitants

- CIS
- EU-10
- European Region
- European Union
- EU-15
Hospital Discharge Cardiovascular Disease

No / 1,000 inhabitants

Ischemic Heart Diseases 29% ↑
Cerebrovascular Diseases 41% ↑
40% of hospital discharges is due to CVD
CVD patients often suffer from comorbidity
Underlying Heart Diseases in AFib

- **Hypertension**: ≤ 75 years (61%) > 75 years (70%)
- **Heart failure**: ≤ 75 years (31%) > 75 years (41%)
- **CAD**: ≤ 75 years (30%) > 75 years (40%)
- **Valvular HD**: ≤ 75 years (25%) > 75 years (29%)
Number of underlying Heart Diseases

![Chart showing the number of underlying heart diseases by age group (Age ≤ 75 vs. Age > 75)].

Legend:
- 4
- 3
- 2
- 1
- 0

- **Age ≤ 75**
  - 0% (red)
  - 20% (orange)
  - 40% (yellow)
  - 60% (light blue)
  - 80% (teal)
  - 100% (teal)

- **Age > 75**
  - 0% (red)
  - 20% (orange)
  - 40% (yellow)
  - 60% (light blue)
  - 80% (teal)
  - 100% (teal)
Increasing number of persons at risk
Prevalence of Diabetes in Adults (Age 20-29)

2003 vs 2025

- Africa
- Eastern Mediterranean and Middle East Region
- Europe
- North America
- South & Central America
- South-East Asia
- Western Pacific
Also increasing number of caregivers?
Average number of physicians in European Region per 1,000 inhabitants:

1985: 3.0
2008: 3.5
6.8 nurses to 1 physician in Ireland
0.5 nurses to 1 physician in Italy
4.5 nurses to 1 physician in the Netherlands
Average number of nurses in European Region per 1,000 inhabitants:

1985: 6.8
2008: 6.7

NURSES PER 1,000 INHABITANTS
"Give your throat a vacation...

Smoke a

FRESH
cigarette"

If the cigarette you have been smoking results in soreness, swelling, and irritation of your throat.

It's the pepper that's left in tobaccos by inefficient smoking methods that makes you cough.

It's the送到 but smoke of harsh, dried-out tobacco that burns and irritates your throat.

There is no pepper dust in Camel—dust's whisked away by a special vacuum-pulverizing process.

There are no ashes, creases, or puckered wrinkles—just fine, smooth, tobacco which in turn is selected for its flavor and freshness, rolled in a way that yet retains the flavors that make Camel smooth, yet delightful.

Camel is the one you can smoke with confidence because they are dust-free and fresh.

Give your throat a vacation, switch to Camel for just one day. Then have them—two packs.

Don't expect the same white gold from our mule of a chemical. The Camel is more mule. And it's better.

Camel's unique smoke—no cigarette aftertaste.
Thank you